W2NPT

The Resonator

Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club

Volume 3, Number 9 www.FairLawnARC.org September 2018

From The President:

Dear FLARC Members,

This month we start planning and executing the antenna upgrades to the club. By the end of the year we should have quite the setup and hope you will spend more time operating at the club enjoying all the upgraded equipment!

This past month we completed the logging computer upgrades to the three HF stations to let everyone use N1MM+ on a more regular basis. We also enhanced our internet connection now to allow traffic to pass through for telnet, NTP, and other applications that require specific port access.

CW classes continue to run with two groups running with Fred W2AAB and George W3EH. Keep on checking the website calendar for upcoming events and activities. If anyone has interest on a specific ham radio topic let me know so I can work on setting up a class, presentation, or demonstration for it. There have been a lot of side discussions going on related to DMR, SDR, digital modes, radio programming, etc. that we could cover.

Brad
KM2C – FLARC President

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Member Profile

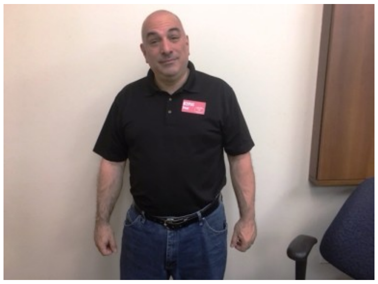
NAME: **Paul Cottone** CALL **K2PJC**

What do you do for a living?

I work for a rather large shipping company at its world technology headquarters. I am a Lead Systems Analyst with over 25 years' experience in the industry. I specialize in management of network and cryptographic infrastructure. Early on in my working career, I was a component level bench technician for an audio repair shop in upstate New York. My educational background is based in Electrical Engineering with specialization in microprocessor development, digital networks and control systems. As pertaining to the hobby of Amateur Radio, I fondly remember classes in radio telecommunications and transmission line design. Who would have thought I would circle back later in life.

How did you get interested in ham radio?

I was talking to my YL's son, who was 13 at the time, about sound waves and electric at the wall outlet. He was intrigued and started to grasp the ideas I was presenting. He had recalled that the *Snap Circuits* set I gave him a few years prior demonstrated these ideas and it clicked with him. Well that just got me to talk more about electronics. Soon we were drawing power supplies and talking about the inner workings. All this discussion reinvigorated my desire to work on projects. I looked online for reference material and started coming across information on ham radio. This started the interest. Also, I recalled a conversation with a buddy at work that a ham license no longer required Morse code. Well that opened a door. Suddenly, that barrier to entry was lifted and I could try it and see if the appeal was real.



Paul K2PJC

Continued on page 3.

The Club

Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

2018 Officers, Committees and Assignments

President	Brad Kerber	KM2C
Vice President	Lowell Van't Slot	W2DLT
Treasurer	Al Rasmussen	WA2OWL
Secretary	Randy Smith	WU2S
Trustee	J Cooper	W2JC
Trustee	Skip Barker	KD2BRV
Trustee	Don Cassarini	N2PRT
Field Day	Steve Wraga	WA2BYX
Member Services	Judith Shaw	KC2LTM
Publicity	Ed Efchak	WX2R
Publicity	Gene Ottenheimer	WO2W
Publicity	Susan Frank	W6SKT
Program	Lowell Vant Slot	W2DLT
Publicity	Karl Frank	W2KBF
Publicity	Brad Kerber *(ex officio)*	KM2C
Social Media	Dave Marotti	NK2Q
Video/YouTube	Thom Guida	W2NZ
VE Liaison	Gene Ottenheimer	WO2W
VE Liaison	Pete Senesi	KD2BMX
Education	Gordon Beattie	W2TTT
Education	Randy Smith	WU2S
Education	John L. Howard	KD2NRS
Education	Fred Wawra	W2ABE
History	Fred Belghaus	W2AAB
Health and Welfare	Judith Shaw	KC2LTM
Photographer	Don Cassarini	N2PRT
W2NPT Trustee	Paul Cornett	W2IP
Technical	Paul Cornett	W2IP
Technical	Randy Smith	WU2S
Technical	Fred Wawra	W2ABE
RACES Director	Dave Gotlib	KD2MOB
RACES Liaison	Steve Wraga	WA2BYX
Newsletter Editor	Ed Efchak	WX2R
FL Town Liaison	Gene Ottenheimer	WO2W
Net Scheduler	Brian Cirulnick	KD2KLN

Fair Lawn RACES Corner

Greetings to all,

There's lots of happenings at the Fair Lawn Radio Amateur Civil Emergency Service (FL-RACES) these days and this is because of the volunteers like you that make this organization what it is today. Here is a brief summary of our happenings:

On Friday, September 7th we held a Message Handling training session as part of our monthly meeting. As you may be aware message handling is an important task when responding to emergencies. There are a several FEMA ICS forms to become familiar with and accuracy counts. Other training sessions will be happening soon and we will keep you posted. In the event you missed the Message Handling training session, we may run it again and possibly offer it to BC-RACES in the future. Thank you Karl W2KBF for running the Message Handling session.

On Wednesday, August 8th at 1900 hours, the third FL-RACES Net took place. David KD2MOB was the Net Control Operator. The Fair Lawn ARC Repeater was used (RX 145.47 MHz / TX 144.87, PL TX Tone 167.9 Hz). Our next FL-RACES Net will take place on Wednesday, September 12th at 1900 hours. Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES to use the repeater.

Here is another achievement - FL-RACES has a new call sign - **KB2FLR**.

K B 2 Fair Lawn Races :))

Continued on page 11.

Member Profile (2)

I purchased my first HT at the BARA Auction this past March. By the next month I was licensed and upgraded to General the following month. Since then, I've purchased a few more radios and supporting devices such as MFJ Antenna Analyzer. I think my shack is growing.

What parts of the hobby most interest you?

The technical aspects of making direct communication with another person around the world is the most exciting. That is all on you and the other side to make it happen. All the skill and science that goes into this hobby is awesome. I also enjoy and respect the heritage of Amateur Radio. One of my favorite sections in The Resonator is The Way We Were.

What does belonging to FLARC mean to you?

FLARC is an excellent opportunity to get together with other folks who are interested in amateur radio to operate and learn together. I've already had many conversations with members on operating and radio setup and all have been helpful in sharing their vast experiences with me.

What should be the club's priorities in the next year?

I think the club is going in a great direction. The calendar is full of events and there are plenty of opportunities to operate, get together casually and learn from one another. Guest speakers and presentations – this club is a blast. Near and Far net keeps growing. It's all good.

The shack of Paul K2PJC

Member Profile (3)

Other Affiliations:

I am a member of the ARRL. I believe this is a worthy affiliation for all hams as this is a chance to have representation with regulatory agencies and legislative bodies.
Former member of the IEEE and school chapter officer.

What else can you tell the club about yourself and/or ham radio?

I started my interest in the hobby of electronics back around 1984. I was about 15 years old and my older brother was in the US Navy (AX). Being home on leave, he brought some of his electronics tech manuals and I picked one up. I looked it over and thought the material was interesting and that I had a knack for understanding it. A lot of learning has happened since then and still does. One of the best parts of this hobby, is there is always something to learn… and experiment with.

I work during the week and I visit the YL on the weekends. So it's a little difficult to attend weekend events with the club. That said, I made it a point (with permission of course -rimshot) to attend Field Day 2018. I was so impressed with the setup and blown away with the membership in what was accomplished. So being new to this, I wasn't sure what to expect but I'll tell you, I had a great time and learned so much. I actually got a chance to make my first QSO on HF so that was even better. I hope to attend more weekend activities in the future.

My fledgling shack is starting to grow. My operating situation is a little difficult being in an apartment but despite of being told it would be nearly impossible, I had to try. I work 2 meters with a Yaesu FT 2980R. It's a great little 80 W mobile unit used as a base station. I work HF with an Icom 7300. Currently, getting contacts with FT8 but ultimately, want to work phone. Until my antenna situation improves, FT8 will grow my log for WAS, etc.

Current projects:

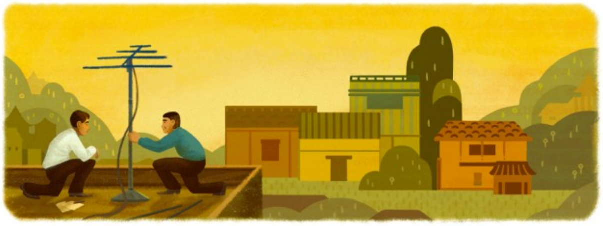
Putting traps on my wire dipole and extend to 40M.

Putting chokes on anything that moves.

Studying for my Extra.

MASTER EVENT CALENDAR

September 21, 2018	Barry Cohen (K2JV) "QRT-500 The Final Transmissions from UK 500 Kc Coastal Distress Watch Stations"
September 15, 2018	Portable Day with BARA (Memorial Park)
September 15-16, 2018	NJ QSO Party
October 19, 2018	Ken Neubeck WB2AMU "6 Meter Operating During A Low Sunspot Cycle"
October 21, 2018	Fair Lawn Street Fair (River Road)
October 27, 2018	Field Trip To Thomas Edison Center, Menlo Park
November 16, 2018	Andrea Slack K2EZ "The Art and Science of VHF Rovers"
November 23, 2018	FLARC Auction - always the Friday after Thanksgiving !
December 7, 2018	FLARC Holiday Party and 2018 Annual Meeting & Election of 2019 officers
December 21, 2018	The State Of The ARRL (Speaker TBD)
	Upcoming 2019 Activities
January 26-27 2019	Winter Field Day (Tentative)
January 17, 2019	Stanley Eikert K3KKH "A Wireless Three-way Antenna Switch and Display"
February 2019	The 2019 FLARC Member Survey
March 2019	RSGB Propagation Workshop or TBD
April 2019	"Earth Day At Great Falls National Historical Park" TBD
May 2019	Garretson Forge and Farm 300th Anniversary Special Event TBD
TBD	"Bring Your Own Boat Anchor" -- An evening of storytelling and demonstrations
TBA	W1TP Enigma Presentation w/Fair Lawn Public Library



Hidetsugu Yagi's 130th Birthday Google Doodle

Follow FLARC ON THE WEB

Facebook:	http://facebook.FairLawnARC.org
Twitter:	@FairLawnARC
Blog:	http://blog.FairLawnARC.org
Youtube:	http://youtube.FairLawnARC.org
Website:	http://FairLawnARC.org

FLARC VEC Exams

Our next test sessions are scheduled for **Saturday, September 15th** beginning at 09:00 at the Community Center. No advanced registration is required but always appreciated. The fee is $15.00 (cash or check).

Please bring positive identification (license, passport, etc.), your original license and a copy, original CSCE and a copy (if credit is needed).

The full exam schedule is on the club calendar at the FairLawnARC.org website. For further information contact VE-Liason@FairLawnARC.org.

Please refer also to the "License Exams" link on the main website--

http://testing.FairLawnARC.org

We appreciate your support of the Fair Lawn Amateur Radio Club!
This is your Club! Be part of it!

Don't Forget!
A Homework Assignment From Our Upcoming October Speaker

Our October 19th speaker will be Ken Neubeck (WB2AMU), one of the leaders in observing and using six meter propagation.

In preparation of his presentation, Ken suggests that we listen on six meters from this point in time until the first week of August, and even participate in the ARRL VHF contest on the second weekend in June, use or listen to six meters during Field Day, and the CQ WW VHF contest in July.

Typically, there will be some activity on the band around that time. Members should listen on 50.125 for SSB activity and if there are some into FT8 mode, listen on 50.313.

The summer months are when Sporadic-E activity occurs in force. Ken notes that he has recently had two consecutive days of skip into Georgia, Alabama and other southern states.

He suggests that we listen as suggested and take notes, the talk will be more relevant and there would be some discussion about what they heard on Six Meters.

Thanks and 73

KEN WB2AMU

WB2AMU speaking at Pacificon about six meter DX

2018 FLARC Speaker Series Locations:

SPEAKERS WHO ARE FLARC MEMBERS:
FLARC CLUBHOUSE

SPEAKERS WHO ARE INVITED GUESTS:
FAIR LAWN SENIOR CENTER

Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

http://apparel.FairlawnARC.org
http://auction.FairlawnARC.org
http://blog.FairlawnARC.org
http://calendar.FairlawnARC.org
http://events.FairlawnARC.org
http://exams.FairlawnARC.org
http://facebook.FairlawnARC.org

http://news.FairlawnARC.org
http://swap.FairlawnARC.org
http://tech.FairlawnARC.org
http://youtube.FairLawnARC.org

NEW !

https://groups.io/g/FairLawnARC

FAIR LAWN
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AMATEUR RADIO CLUB

August 2018 Blog Traffic

August was an impressive month in visitors and in page views... five Fridays vs. four helped for sure. Here is the data:

	August 2018	August 2017	Change
Views	872	663	+32%
Visitors	456	175	+161%
Posts	13	17	-24%

And we continue to grow!! There is new content nearly every day so it's really worth the look to both FairLawnARC.org and the blog.

http://blog.FairLawnARC.org

FLARC By The Numbers

1st Quarter -- 28

2nd Quarter -- 31

The average weekly attendance
at the clubhouse on Fridays (members and guests)

1st Quarter -- 64%

2nd Quarter -- 66%

The percentage of total club members
who have attended at least one club meeting

1st Quarter -- 14

2nd Quarter -- 15

The average number of weekly check-ins to the *Near and Far Net*

2nd Quarter -- 408

1st Quarter -- 365

Total gross attendance (members and guests)
at the clubhouse on Fridays (members and guests)

YTD -- 773

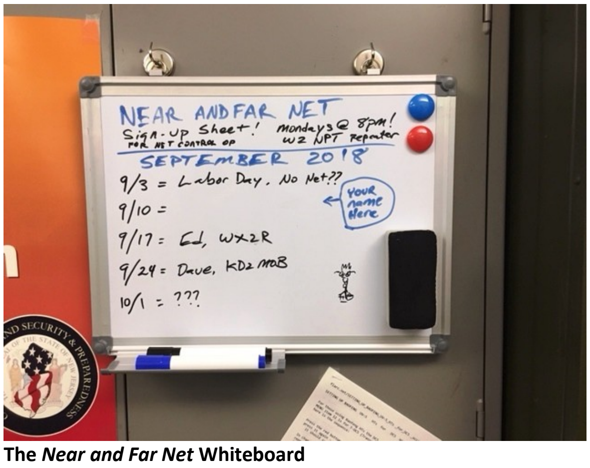
Total gross attendance (members and guests)

Tnx to Judith KC2LTM for the great record-keeping!

Help KD2KLN, Help The Club

The success of the Monday night net is in having rotating net controls to spread the labor and keep everyone involved. Volunteer by signing up on the club's whiteboard or drop Brian KD2KLN, our Net Scheduler, a note.

Nets fail when the burden falls to a few... let's ensure that this doesn't happen to FLARC.



The *Near and Far Net* Whiteboard

In A Nutshell

The club has been busy with the North American QSO Party (QSO is ham shorthand for conversation or contact) which is a fun and exciting exercise!

Coming up on the 15th and 16th of September the New Jersey QSO Party will be held at the club from noon till closing and on Sunday from 10 to 4. (The hours on Saturday are actually from noon to midnight, so if you are not at the club, operate from home!)

Then there was the Club's trip to the Edison museum in West Orange -- also exciting and informative.

At the club, exploratory research has been ongoing for the antenna replacements on the roof and as the plans become finalized the parts have been ordered and work will soon begin -- all in an effort to improve our station's operating quality. These upgrades will be possible due to the hard work of the volunteers and the co-operation of Jimmy Graff representing the Borough of Fair Lawn. The Fair Lawn Amateur Radio Club is grateful for the long-standing use of the Recreation Center.

DE Fred W2ABE.

Congratulations!

Pete (KD2BMX) reports the results of the August 11, 2018 FLARC VEC Amateur Radio Exam Sessions:

Total Number of Candidates served: 1

Name	Call	License Earned
Marie-Claude Fares	KD2QIS	Technician

Your Mailbox Is Full

And so is everyone else's it seems. Let's keep blanket correspondence to "members," etc. to a minimum and only for specific purposes. It's a waste of life energy to have to read and delete stuff that has no meaning or value to you. Read who sent you something and then reply appropriately -- not just blanket replies to all. Use the listserv where appropriate.

Amateur Radio Emergency Data Network (AREDN) Wins ARRL Microwave Use Award -- Congrats To Randy WU2S

WHEREAS the Amateur Radio Emergency Data Network (AREDN) Project team has made noteworthy progress in utilizing the amateur radio microwave bands including: Extending the high-speed multimedia AREDN network capabilities from solely the 2.4 GHz Wi-Fi band to 900 MHz, 3 GHz and 5.8 GHz. On the 2.4 GHz band, the range was extended to include two channels on amateur radio frequencies below the Wi-Fi channels, thus improving SNR and throughput; Supporting weatherproof, commercial Wi-Fi devices from Ubiquiti and TP-Link enabling over-the-air software upgrades to eliminate the need to physically visit remote units; Built-in tunneling capability to enable connecting mesh "islands"; Added 802.11n to the RF protocol which improves the maximum data rate capability from 54 Mbps to 144 Mbps; Continuously expanded the number of supported devices within the Ubiquiti AirMax product line so that hams have more choices suited to more conditions; Improved a variety of technical and user interface components to make AREDN networks easier to configure and manage; THEREFORE, the ARRL Board of Directors confers the 2018 ARRL Microwave Development Award on the Amateur Radio Emergency Data Network (AREDN) Project team.

Club Apparel Is Here!!

Club apparel is always in vogue. Red is always in and your club friends all have them... you *want* a shirt or jacket for the next FLARC event!

Don't forget.... they're easy to order.

Go to www.hamthreads.com
or visit http://apparel.FairLawnARC.org to **check out the item selection that is posted on the FLARC website (with pictures and prices).** Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo.

Note:
RED is the primary and preferred club brand standard shirt color.

NEW!! Sebastian SQ3U shows off this FLARC shirt at the Vintage Night presentation. Now, does he look good or what!! TNX!!

More Congratulations!

Pete (KD2BMX) reports the results of the August 25, 2018 FLARC VEC Amateur Radio Exam Sessions:

Total Number of Candidates served: 6
Congrats to all!!

Name	Call	License Earned
Lawrence Maleszewski	KD2QFI	Tech
Anton Skvortsov	K2PLB	Extra
Marc Rosenberg	KD2QJQ	Tech
Leonid Karchevsky	KD2QHK	General
Bradley McLaurin	KD2QJP	Tech
Robert Moleti Jr	KD2OTP	Extra

Portable Day Is Coming With A Date Change

Autumn Portable Day with BARA will be held on **Saturday September 15th** beginning at 0900 until conclusion at Memorial Park in Fair Lawn. Everyone is invited and BARA provides the food.

The date change makes for a day-night ham radio double-header with Portable Day in the morning followed by the NJ QSO Party beginning in the afternoon and extending into Saturday evening.

So save the date and let's play two....

BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such as gift is worthy.

About The Club

The Resonator is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception.

The club meets every Friday at 7PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM.
Visitors ARE ALWAYS welcome at our meetings.

FLARC operates the W2NPT repeater (145.470- PL **167.9**) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has approximately 125 paid members.
Dues are currently $25 per year/$20 for new members.

For more information, please see our website, at
http://membership.FairLawnARC.org

Ham Lite by Brian (KD2KLN)

Ohhh..
Getting really good reception now!
kd2kln

NEW! A new gathering place for club members has been set up on the Groups.io service ... Why another group? It has more features than our current WordPress 'blog' and allows members to select what and how they receive emails. This group might eventually replace our current blog. If you haven't signed up yet, check it out and sign up!

https://groups.io/g/FairLawnARC

Interested in Chasing DX?

A casual group of FLARCers including Van W2DLT, John KD2NRS, Brad KM2C, Karl W2KBF, Nomar NP4H, Steve WI2W, Larry WA2ALY, Fred W2AAB, and Jim W2JC have formed an email group to keep each other in touch in (real) time of when the rare or interesting ones show up to chase. Interested? See or contact Van W2DLT or Jim W2JC.

FAIR LAWN
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FAIR LAWN'S
MINISTRY OF TECHNOLOGY!

Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

Month	Name	Call Sign
January 2016	**Pete**	**KB2BMX**
February	**Marco**	**KC2ZMA**
March	**Ron**	**KC2TBD**
April	**Kai**	**K2TRW**
May	**Larry**	**WA2ALY**
June	**Dave**	**N8MAR**
July	**Steve**	**WI2W**
August	**Thom**	**W2NZ**
September	**Brian**	**KD2KLN**
October	**Brad**	**KM2C**
November	**Al**	**WA2OWL**
December	**George**	**W3EH**
January 2017	**Fred**	**W2ABE**
February	**Dave**	**KD2MOB**
March	**Randy**	**WU2S**
April	**Lee**	**KD2DRS**
May	**Gene**	**WO2W**
June	**Carol**	**KD2NMV**
July	**Kevin**	**KC2KCC**
August	**Robert**	**KD2NOG**
September	**Robert**	**KD2BKD**
October	**John**	**KD2NRS**
November	**Fred**	**W2AAB**
December	**Margaret**	**W2GB**
January 2018	**Brian**	**KD2OAZ**
February	**Bennett**	**KO2OK**
March	**Van**	**W2DLT**
April	**Aly**	**AL0Y**
May	**Bruce**	**NJ2BK**
June	**Dave**	**N2AAM**
July	**Karl and Susan**	**W2KBF and W2SKT**
August	**Steve**	**KA2YRA**
September	**Paul**	**K2PJC**

23 And Me On August 13th

The Near and Far Net set a new record of check-ins on August 13 of 23 -- breaking the previous mark of 18 set just last month. Nearly one in five club members checked in that evening -- remarkable.

Here are the check-ins on the most recent night of FLARC history:

KD2KLN – Brian (Net Control)
WO2W -- Gene
N2AAM – Dave
W2DLT – Van
KA2YRA – Steve
W2NZ – Thom
K2PJC – Paul
KD2BKD – Bob
WU2S – Randy
W6SKT – Susan
W2AAB – Fred
WA2BYX – Steve
W2JC – Jim
W2KBF – Karl
KD2MOB – David
KD2GKA – Rosyln
W2REC – Bob
N2OEL – Noel
W2IP – Paul
WX2R – Ed
N2SIQ – Tony
KD2QFI – Larry
KC2TBD – Ron

Congrats to all for making this the best net around!!

CW Classes Underway

George W3EH and Fred W2AAB have the CW class underway. George reports that the sessions have started with about 5 or 6 and another 3 or 4 drifted in. No two classes are ever the same and some people shift back and forth between he and Fred.

Interested in joining in or signing up?
See George and/or Fred on any club night.

The Near and Far Net

Now in its second year, the FLARC Near and Far net is chugging along each week. Here is list of our check-ins beginning on New Year's Night in no particular order. Mondays at 8PM on the repeater.

Name	Call
Gene	**WO2W**
Van	**W2DLT**
Thom	**W2NZ**
Steve	**KA2YRA**
Ed	**WX2R**
Fred	**W2AAB**
Karl	**W2KBF**
Brian	**KD2KLN**
Dave	**NK2Q**
Ron	**KC2TBD**
Dave	**KD2MOB**
Jim	**W2JC**
Mike	**KC2ZX**
Steve	**WA2BYX**
Robert	**KB2BKD**
Susan	**W6SKT**
Steve	**WI2W**
Brad	**KM2C**
John	**KD2NRS**
Art	**WA2KXE**
Brian	**KD2OAZ**
Brian	**W2EMC**
John	**KD2NRS**
Randy	**WU2S**
Jon	**KD2PDS**
More Elsewhere in The Resonator!!	

September 2018 Net Controls

THANKS TO BRIAN KD2KLN FOR TAKING OVER THE ROLE OF SCHEDULING THE WEEKLY NETS!!!.

Remember the W2NPT FLARC repeater is at 145.470 (-) with a PL tone of 167.9. The net starts promptly at 2000 local time. Everyone is welcome.

Date	Net Control
September 3	**Labor Day**
September 10	**KD2MOB**
September 17	**WX2R**
September 24	**Check the Whiteboard!**

2018 Edison Fest Continues... Now Also At Menlo Park!!

At the Spring BARA hamfest we ran into Chuck (K2RRV) who also doubles as a tour guide to the Thomas Edison Center and Menlo Park Museum, separate from our August trip to the Edison Lab in West Orange.

Menlo Park was Edison's first laboratory and he later moved to West Orange to be closer to New York for business purposes.

We've set **Saturday, October 27th** as a day for a visit with Chuck leading the tour. Admission is $5.00 and will be quite a complement to our earlier visit.

Let Ed (WX2R) know of your interest and we can take it from there. So far we have 16 pre-registered.

Edison Monument at Menlo Park

Upcoming Contests

Always remembering that we are "casual" contesters, the club will participate in this upcoming event and invites operators -- both skilled and those desiring to be.

- **September 15-16**: New Jersey QSO Party -- voice and CW and a chance to meet a lot of old friends who want to stay in touch with NJ.

See Van W2DLT for details.

No pressure -- lots of fun!

FLARC Participates In The NA QSO Party on August 18th

Saturday afternoon, after the club field trip to the Edison Labs in West Orange, there was quite a surprising turnout at the club as FLARC participated in the annual North American QSO Party (phone) on August 18th, with a larger turnout than last year. The club made 72 contacts (fewer than last year) for 2,016 points but band conditions were also generally poorer. The club also devoted considerably more time to getting new members and those who wanted to learn more about contesting on the air, continuing our tradition of being "casual contesters."

A special thanks to all who operated -- W2DLT, KA2YRA, KD2GKA, KD2KLN, N2AAM, SQ3U and W2AAB. And to W2JC, who managed the logs and score submission. Those who visited included W2KBF, WA2BYX, KC2TBD, KC2ZX and WX2R. The total op/visitor count was also slightly lower than last year... let's look to get the participation rate up for the upcoming NJ QSO Party!!

FAIR LAWN RACES (Continued)

The volunteer efforts of our members are very much appreciated. All of the events noted above could not have happened without you.

Our monthly meetings take place right after the FLARC business meeting. Please join us for the next FL-RACES meeting.

As a reminder, the Bergen County RACES nets are held on the 2nd and 4th Wednesdays every month at 1945 and various towns host these nets throughout the year. Two repeaters are utilized for these nets - Paramus, NJ (RX 146.79 / TX 146.19, PL TX Tone 141.3) and Franklin Lakes, NJ (RX 146.79 / TX 146.19, PL TX Tone 162.2). The Franklin Lakes repeater is the primary repeater.

Regarding the Bergen County RACES Net, FL-RACES will be hosting the BC-RACES Net on the 2nd and 4th Wednesday in January 2019! The Net Control Operator for these nets is to be determined.

If you are interested in joining the Fair Lawn RACES, please contact me. You don't have to be a Fair Lawn resident to be a part of Fair Lawn RACES. For information regarding Bergen County RACES, please go to http://www.bcnjraces.org.
Thank you very much. See you soon and 73.
Dave KD2MOB

FLARC Visits The Edison National Historical Park

On August 18, thirty (30) FLARCers, family and friends toured the Edison facility in West Orange. A captivating 90 minute look at the history of one of the great inventors and the impact upon all of us.

Thanks to KD2BRV, W2KBF, W6SKT, W2JC, NP4H, WU2S, N2AAM, KC2LTM, W2ABE, KA2YRA, WX2R, WI2W, KC2BKD, KC2TBD, KD2NRS, KD2AHK, KD2JQZ, W2DLT, AC2WM, WB2LUC, KC2UCU, and KD2GKA.

The Black Maria

Ranger Mike speaks into the recording device

Edison (sadly) was not a ham--the plaque is for his 73rd birthday

Third Generation Amateur Radio Operator

Ben W2AMP

W2AMP Ben McCabe 14 years old (formerly KD2QHI) of Ramsey, NJ, now proudly uses the call sign issued to his late grandfather Ed McCabe around 1949. Ben is the son of Tom McCabe N2AXX licensed since 1978.

Ben passed his Technician Class license July 28, 2018 at the Fair Lawn Amateur Radio Club's VE session. Ben is pictured with some of the equipment from his grandfather's original station: Harvey-Wells TBS-50C Bandmaster transmitter and National NC-125 receiver.

Ed W2AMP (SK)

The late Ed McCabe W2AMP operating from the Bronx circa 1949. Ed retired from ABC-TV and also served as a radioman in the US Navy at Naval Air Station Lakehurst's airship or "blimp" squadron.

Theoretics Demystified

What is Q? - - . - , or a mysterious character on Star Trek? Yes but for us hams and those in electronics it stands for the Quality of a coil in relation to its performance in circuitry. It is also defined as the ratio of reactance to resistance for that particular inductor at the design frequency. Inductors generally consist of wire wound into coils to perform at a particular frequency.

The inductance is enhanced sometimes a thousand fold by the use of a steel or iron or ferrite core, (which is another type of magnetically permeable material formed out of a powder). Using these magnetic cores or forms multiplies the magnetic field and thus the inductance value of the coil. When a current flows in a conductor a magnetic field is created and when wound into a coil the field in one conductor causes a bit of counter emf to flow in the next conductor winding. This reverse emf has a damping effect on the adjacent winding. When this is multiplied by the many turns on the coil form or core the effect is multiplied.

Generally as the frequency goes higher the number of turns and spacing decreases but there are a myriad of factors involved which are beyond the scope of this column. The Q generally describes the ability of the inductor to retain energy, with the bandwidth relative to the center frequency and how much of a damping factor is present (think drag, the same way a door closer keeps the door from slamming shut). The more the inductor is damped so that more 'drag' is induced, the more energy is required to maintain the same output in an oscillator or oscillating system. In other words a high damping factor causes more loss in a system and that means more power is needed to sustain the same level of activity in that system. As an aside, the letter Q was chosen to represent the factor we are talking about by K.S Johnson of Western Electric because all of the other letters of the alphabet were taken up by other electronic values -- but it so happens that Q and quality start with the same letter (obvious).

Another way that Q is determined is to look at an inductor in a system. The tighter the bandwidth the higher the Q and that is how Inductors are used as filters to eliminate signals outside of their band width. Some are wound on transformer like cores and are designed to eliminate anything above DC, and they are called chokes. Putting it very simply capacitors 'pass' AC but inductors 'pass' DC. Putting the two together will give you a tuned circuit. Of course the values need to be calculated for each for the specific target frequency. The math is quite extensive and beyond the scope of this column as I have said before. Next time you have a circuit problem, perhaps you can call on Q! Fred, W2ABE, 73.

FLARC VISITS THE EDISON NATIONAL HISTORICAL PARK

The FLARC Edison Visitation Team Looking Good In West Orange

Ron KC2TBD, a former chemist, at home in Edison's lab

Ranger Mike demonstrate the Edison production process

Edison's office and the tribute to his invention of the light bulb

The club saw

ED-itorial -- It's All In The Numbers

Many years ago I was certified in Six Sigma. My training started off with an introduction to Kaizen or Continuous Improvement. The first lesson from my sensei was "always speak with data". Maybe as a researcher, it was easy to understand as a concept but I never forgot it. It makes sense and it's always relevant.

Today's FLARC is awash in positive data. WA2OWL reports that membership on August 1 stood at 142 -- not only an all-time FLARC record but we are now possibly the largest club in New Jersey and one of the top four in size in the ARRL Hudson Division. So we are not only the "friendliest" but maybe also the "largest" in NNJ. Hopefully the two go hand-in-hand.

And there are even more good numbers -- an average weekly club attendance of 31 for the second quarter. Nearly one thousand sign-ins among members and guests since the start of the year. A sell-out for our recent visit to the Edison lab in West Orange. An average of 15 check-ins for the Monday night net in Q2 (up from Q1) and a remarkable 23 on August 13th. Record metrics for our social media channels. Well attended monthly programs. Even a newsletter.

Growth. Enthusiasm. Participation. All signs of a healthy, growing club.

In our annual member survey, 69% said that the club should continue to "grow in both size and reputation" during 2018. A 133% increase in membership since 2015 , more publicity generated than for any other club in the NNJ section, and the creation of a RACES chapter look to fulfill that objective and there are still four months of this year to go.

Is there a limit to club growth? Probably. Without the addition of more open club nights (or days) we are possibly near capacity. Without new ideas, more volunteers, and improved operating capability member interest, and therefore the club, can metastasize.

The next steps are up to us. The real question is "what's next?" How do we best manage present and future growth? What do we expect of our current and future officers and trustees? How can you participate to help the club grow, diversify and keep it both interesting and relevant?

It's September. Before you know it... December. The club needs your data now to make the future happen.

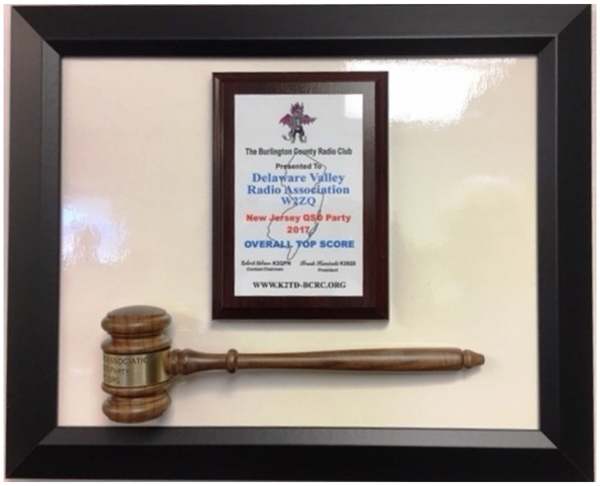
DE Ed WX2R

NJ QSO Party Is September 15-16th At The Clubhouse

Always a highlight of the contest year, FLARC will again participate using the clubhouse stations during the Rec Center day. Last year we finished second and more operators will give us an even better chance despite our geographic disadvantage to other NJ participants.

Of interest this year is that we will be using the special call of **N2J,** which was noted as particularly clever by a devoted contester. Will it give us an advantage? Stay tuned.

The Burlington County Radio Club (BCRC) is sponsoring the NJQP for the 7th year.
Here is what the winner receives:



Eye on the prize: This is the First Place award for winning the NJ QSO Party now held by the Delaware Valley Radio Association n West Trenton. This pix was taken at their clubhouse.

This is always a fun event -- lots of people want to work us and you hear a lot of stories of everyone who has ever lived in Bergen County or New Jersey -- seemingly everyone. And we hear from a lot of old FLARC members as well.

If you can't work from the station, work from home... we'll take all points and hopefully the gavel from the DVRA folks this year. [If you work from home, when you submit your Cabrillo file be sure to indicate Fair Lawn ARC so our club gets credit for your score. See example header line below.]

CLUB: Fair Lawn ARC
CONTEST: NJ-QSO-PARTY

Radio Waves from the Past

Curated by Randy WU2S

With just over a century of practical radio use by amateurs, scientists, engineers and businessmen, it is interesting to look back at the early days to discover what has changed since then. Maybe more importantly, what has not changed since then?

In this series of public domain articles from the early twentieth century we set the stage to ask many questions.

- *Would we follow this same advice today?*
- *How has our understanding of radio propagation and electronics evolved since then?*
- *How did access to amateur radio change people's relationships in the past and how does it do so today?*

We begin with a series of *Letters of a Radio-Engineer to His Son* *by John Mills published in 1922.*

LETTER 1

ELECTRICITY AND MATTER

My Dear Son:
You are interested in radio-telephony and want me to explain it to you. I'll do so in the shortest and easiest way which I can devise. The explanation will be the simplest which I can give and still make it possible for you to build and operate your own set and to understand the operation of the large commercial sets to which you will listen.

I'll write you a series of letters which will contain only what is important in the radio of to-day and those ideas which seem necessary if you are to follow the rapid advances which radio is making. Some of the letters you will find to require a second reading and study. In the case of a few you might postpone a second reading until you have finished those which interest you most. I'll mark the letters to omit in this way.

All the letters will be written just as I would talk to you, for I shall draw little sketches as I go along. One of them will tell you how to experiment for yourself. This will be the most interesting of all. You can find plenty of books to tell you how radio sets operate and what to do, but very few except some for advanced students tell you how to experiment for yourself. Not to waste time in your own experiments, however, you will need to be quite familiar with the ideas of the other letters.

What is a radio set? Copper wires, tinfoil, glass plates, sheets of mica, metal, and wood. Where does it get its ability to work – that is, where does the "energy" come from which runs the set? From batteries or from dynamos. That much you know already, but what is the

Radio Waves from the Past (2)

real reason that we can use copper wires, metal plates, audions, crystals, and batteries to send messages and to receive them?

The reason is that all these things are made of little specks, too tiny ever to see, which we might call specks of electricity. There are only two kinds of specks and we had better give them their right names at once to save time. One kind of speck is called "electron" and the other kind "proton." How do they differ? They probably differ in size but we don't yet know so very much about their sizes. They differ in laziness a great deal. One is about 1845 times as lazy as the other. That is, it has eighteen hundred and forty-five times as much inertia as the other. It is harder to get it started but it is just as much harder to get it to stop after it is once started or to change its direction and go a different direction. The proton has the larger inertia. It is the electron which is the easier to start or stop.

How else do they differ? They differ in their actions. Protons don't like to associate with other protons but take quite keenly to electrons. And electrons – they go with protons but they won't associate with each other. An electron always likes to be close to a proton. Two is company when one is an electron and the other a proton but three is a crowd always.

It doesn't make any difference to a proton what electron it is keeping company with provided only it is an electron and not another proton. All electrons are alike as far as we can tell and so are all protons. That means that all the stuff, or matter, of our world is made up of two kinds of building blocks, and all the blocks of each kind are just alike. Of course you mustn't think of these blocks as like bricks, for we don't know their shapes.

Then there is another reason why you must not think of them as bricks and that is because when you build a house out of bricks each brick must rest on another. Between an electron and any other electron or between two protons or between an electron and a proton there is usually a relatively enormous distance. There is enough space so that lots of other electrons or protons could be fitted in between if only they were willing to get that close together.

Sometimes they do get very close together. I can tell you how if you will imagine four small boys playing tag. Suppose Tom and Dick don't like to play with each other and run away from each other if they can. Now suppose that Bill and Sam won't play with each other if they can help it but that either of them will play with Tom or Dick whenever there is a chance.

Radio Waves from the Past (3)

Now suppose Tom and Bill see each other; they start running toward each other to get up some sort of a game. But Sam sees Tom at the same time, so he starts running to join him even though Bill is going to be there too. Meanwhile Dick sees Bill and Sam running along and since they are his natural playmates he follows them. In a minute they are all together, and playing a great game; although some of the boys don't like to play together.

Whenever there is a group of protons and electrons playing together we have what we call an "atom." There are about ninety different games which electrons and protons can play, that is ninety different kinds of atoms. These games differ in the number of electrons and protons who play and in the way they arrange themselves. Larger games can be formed if a number of atoms join together. Then there is a "molecule." Of molecules there are as many kinds as there are different substances in the world. It takes a lot of molecules together to form something big enough to see, for even the largest molecule, that of starch, is much too small to be seen by itself with the best possible microscope.

What sort of a molecule is formed will depend upon how many and what kinds of atoms group together to play the larger game. Whenever there is a big game it doesn't mean that the little atomic groups which enter into it are all changed around. They keep together like a troop of boy scouts in a grand picnic in which lots of troops are present. At any rate they keep together enough so that we can still call them a group, that is an atom, even though they do adapt their game somewhat so as to fit in with other groups – that is with other atoms.

What will the kind of atom depend upon? It will depend upon how many electrons and protons are grouped together in it to play their little game. How any atom behaves so far as associating with other groups or atoms will depend upon what sort of a game its own electrons and protons are playing.

Radio Waves from the Past (4)

Now the simplest kind of a game that can be played, and the one with the smallest number of electrons and protons, is that played by a single proton and a single electron. I don't know just how it is played but I should guess that they sort of chase each other around in circles. At any rate I do know that the atom called "hydrogen" is formed by just one proton and one electron. Suppose they were magnified until they were as large as the moon and the earth. Then they would be just about as far apart but the smaller one would be the proton.

That hydrogen atom is responsible for lots of interesting things for it is a great one to join with other atoms. We don't often find it by itself although we can make it change its partners and go from one molecule to another very easily. That is what happens every time you stain anything with acid. A hydrogen atom leaves a molecule of the acid and then it isn't acid any more. What remains isn't a happy group either for it has lost some of its playfellows. The hydrogen goes and joins with the stuff which gets stained. But it doesn't join with the whole molecule; it picks out part of it to associate with and that leaves the other part to take the place of the hydrogen in the original molecule of acid from which it came. Many of the actions which we call chemistry are merely the result of such changes of atoms from one molecule to another.

Not only does the hydrogen atom like to associate in a larger game with other kinds of atoms but it likes to do so with one of its own kind. When it does we have a molecule of hydrogen gas, the same gas as is used in balloons.

We haven't seemed to get very far yet toward radio but you can see how we shall when I tell you that next time I shall write of more complicated games such as are played in the atoms of copper which form the wires of radio sets and of how these wires can do what we call "carrying an electric current."

Get active
Get involved
Get on the air

Around The Shack

Hal Kennedy, WV2QPW (January, 1961), now N4GG

Fred, W2AAB wrote a great "The Way We Were" that appeared in the February 2018 issue with more still in the June 2018 issue of The Resonator. It brought back many memories and a lot of what I could offer would be repetitious with Fred's writing. I'll add my own FLARC story and try to fill in a few details to add to Fred's.

I lived on Canger Place in Fair Lawn from 1952 until 1963 and still miss the place. There sure was and is a great radio club in town! I started changing the plugs on toasters at age five and by age 7 or 8 I had worked up to changing the filter capacitors in record players that had too much hum. I was born an EE. My dad passed away in December 1952 and I think my mom was always on the lookout for things to encourage my interests. She came home one day from shopping at the A&P and said she had met this nice young man named Van and I ought to go see his ham radio station. I was 12, Van was 18. Off I went on my bike from Canger Place to 12th street and Van's wonderland basement. I was AMAZED. The call sign as ever was W2DLT. I don't remember the first rig I saw at Van's, but I do remember an HQ-129X and a Viking Valiant. Soon a 6 or 7 foot rack started getting built to run QRO – those things were all home brew in those days unless you were rich – in which case you might have bought a Collins KW-1. Those were capable of TVI out to about 10 miles. Van also had a Heathkit Hi-Fi tuner and preamp, and Bo Diddley was often blaring when the ham receiver was turned down. One power switch at the foot of the basement stairs turned everything on all at once. I was hooked.

I'm unclear how I migrated from Van's basement to FLARC, but I remember well that Van was not a member at that time nor was Skip, K2RJF. My "official" time as a FLARC member was 1960 to 1963, but I have carried on a relationship with the club for all the years since. FLARC was "newly" formed in early 1960, but I'm aware there was an earlier version that might have met in one of the buildings at Memorial Park (?). Carl, K2YCB was the city electrician and spent lots of time at Memorial Park, wiring lights and a PA system around the pool. Van, Skip and others may have been in the earlier FLARC and as the K2YCB/W2NPT era came to an end they probably joined or rejoined at that point. I distinctly remember being at Memorial Park on the 4th of July one year – Van and others had 2M Gonset Communicators (Gooney Boxes) in their cars and were watching the crowd as a civil defense exercise. I know I was there at the start of the Carl/Frank club because Carl asked me to come up with a club constitution so that we could be an ARRL affiliated club (I think that was the reason). I wrote to the ARRL (no internet then!) and they sent me a sample. I typed it up (typewriter, white ribbon for typing out mistakes) with the FLARC name and officers added in, and it was approved. I wrote the original FLARC constitution – at age 12.

As Fred remembered, FLARC met upstairs in the old Ackerman estate. What a great place for a 12 year-old kid to explore when nobody was looking. I saw every inch of that building including the city offices where we were not allowed. The basement was particularly interesting, as well as the cupola up at the top. You could see most of Fair Lawn from that copula.

I spent many happy hours hanging dipoles off that cupola, along with my good friend Ken Dreyfack who became WV2QYZ. His dad, Ray Dreyfack, also started showing up and became WA2SLD. Ken and Ray (sk) both left the hobby after a brief stint. I reacquainted with Ken after a 55 year absence – found him on Facebook. I asked him why he had moved on from ham radio. He said: "I thought I was going to talk to people about things, but all they wanted to talk about was ham radio." Funny, that has never seemed like a problem to me.

When I first showed up in 1960, Carl was President and Frank had some title – he may have been VP. "President" seemed to matter to Carl; I don't think Frank gave a hoot about titles – he just wanted to teach code and help kids and adults get their licenses. Frank liked to hang loose, teach and mingle. Carl liked order. Trouble was brewing, but as a 12 year-old kid I was oblivious.

Around The Shack (2)

Frank had his own home-rolled method for teaching code and it was great. I still remember his mnemonics. L is: The L with it, the L with it…..get it? F is: get a haircut, dit-dit-daaaahhh-dit, get (dit) a (dit) hair (dah) cut (dit). "That's how it sounds" he'd say as he tapped it out on a straight key. I never saw a bug at FLARC and keyers were unknown. Each week I'd learn a few more letters from Frank and after a while I had the whole alphabet figured out and was shaky at about 3 WPM. One of the most magical nights of my life happened around that time and I remember it vividly 58 years later. I had saved up enough newspaper delivery money (Bergen Record – 21 cents a week, only 3 cents a day!) to buy an SX-110 and found out somehow that W1AW sent code practice. After some trial and error I finally figured out how to tune them in and started trying to copy 5 WPM. On my first try I copied about half of what I was hearing. The word "balloon" was the first word I was able to write down and I had to go back and stare at what I wrote before I figured out I had actually copied anything. It was going so fast I couldn't stop to see what it said. I figured out much later they were sending text from QST and that night it must have been from some article about balloon antennas. I was as excited as I have ever been. I was copying code, off the air!!! About balloons!!! Thanks Frank Leonard!!!!!

Frank was of course Mr. No pa-ta-tas today. Among the kids, Carl's nickname became Kill Two Young Citizen-Banders (K2YCB).

For me, things rolled along just fine at FLARC. Someone brought a T-23 ARC 5 up to the second floor which we had going on 2M AM. Heathkit Towers were popular then and there were lots of stations to work from our perch on the hill. A chap named Carlton Bacon (mentioned by Fred – same exact recollection) taught theory for a while and kept telling me I was wasting my time on the air. He brought his daughter Cynthia to a few meetings. Carlton Bacon really did want to teach theory – he had an advanced degree and was a full-up EE – while most of us were teenagers with too much energy for a blackboard. After a while Carlton Bacon gave up.

The first week in January 1961, Carl gave me my novice exam, and my license showed up at the end of January. By the time it arrived I had bought and put together a DX-20 and strung a 15 meter folded dipole out of an attic window. I owned one XTAL (7.047 tripled to 21.141). I decided to bootleg one night before my license showed up and I was shaking like a leaf when I called CQ. I had not preplanned anything – I made up a call sign on the spot (probably one that made no sense) and darned if somebody didn't answer. I was too scared to reply. I didn't know what to do and I didn't want the FCC to send me to jail. After that evening I waited for the license. WV2QPW showed up in the mail, and my first QSO was with W2DLT. I still have all my logbooks – there is Van on page one. I may be nuts for putting those QSOs in the LOTW – but if anyone wants an LOTW confirmation with WV2QPW from 1961 they are in there. In those days you called CQ on the frequency you had (21.141 for me) and then tuned the entire band for an answer. We worked split by necessity and before split was cool!

As Fred noted, Carl had a rough side to him. One night at FLARC I mentioned to Carl I would really like to find the money to buy a Twoer and get on 2M AM (the only voice band allowed for novices). Carl said, and this is an accurate quote: "I'll break your arm kid if you get on two meters." I had no dad – nobody had ever talked to me that way before – it made a big and everlasting impression. My first exposure to being around grown men was at FLARC. I gave up the idea of getting a Twoer – I didn't have the money anyway - and bore down on HF with the DX-20. By July 1961 I was feeling good at 13 WPM and July 5th, 1961, my mom took Ken Dreyfack and me down to the wharves in NYC to the FCC. We both passed our General Class licenses, then toured an aircraft carrier that was in port. What a great day! At the FCC the windows were open and the room was HOT. The desks had ruts in them – your pencil could skip easily. The examiner was a guy named Finkelstein, who loved to torture kids and blew a lot of cigar smoke around the room. I returned to that room a year later and got my Extra. I could send 25 WPM by straight key just fine and I thought Finklestein liked me when he heard me send – I think now that I was delusional then.
Thanks again Frank Leonard!

Around The Shack (3)

So, back to FLARC… Frank came up with an Army Signal Corps code machine that ran off paper tape. That thing helped a lot. Frank could speed it up and it sent random 5 character groups – which is the way to go from 5 WPM to 25 WPM with some confidence.

A highlight of FLARC meeting nights was a raffle. Whoever won had to bring a “gift” (usually a handful of parts) for the next raffle. Everyone got one ticket. I won a few times. There were dues… maybe 25 cents a month? I was a 13 year-old Treasurer for a year – I learned a lot at FLARC.

Along the way some nice gear showed up at FLARC. There was a Heathkit Apache that Fred mentioned along with an SX-101A. Transceivers didn’t exist – other than the Collins KWM-1, which none of us had ever heard of.

After a year or two I finally woke up to the fact that there was a great deal of friction between Frank and Carl although I was still pretty oblivious. It got worse and I couldn’t help but notice. I seem to remember Frank leaving for a while, and then Frank was back and Carl was gone and did not return. I missed Carl – he was something of a father figure for me – me having no dad. I was over at his place quite a bit after a while and helped him do some tower work. At that point Carl had a Central Electronics 100V (or 200V?) and a Collins receiver – high-end stuff. I was also in Van’s back yard a lot, building a bamboo Quad and a 10 meter “Wonderbar.” For 30 miles around Fair Lawn, everyone hung out on 29.000 Mc. There was nearly a continuous QSO there for years including a lot of guys running mobile. There was also something called the “Night Owl Net” that started at midnight. I had a Gonset Super 6 in my mother’s car for a while (too young to drive) and a home-brew transmitter called a 28-28 (2E26 running 28 watts on 28 Mc) Van had built and loaned me. HV for the transmitter came from a dynamotor. I remember Carl driving down to FL a few times – I would always work him on 10M AM as he drove down the NJ Turnpike. Carl was running a Gonset G-76, mounted in his car on a custom sheet metal mount built by Frank Leonard. I home-brewed my way along – building a screen grid modulator for the DX-20, adding a VF-1 and then building a class C amplifier running a pair of 1625s. I also owned a coveted XTAL for 7250 Kc, which quadrupled in the DX-20 to 29 Mc. Life was good. [Note: it was Kc, Mc and CPS in those days, not KHz, MHz, and Hz).

Van got me started in Army MARS and that got me lots of free stuff and started in RTTY. RTTY the hard-core way. Model 19 teletype machine, 7 foot rack dual-diversity TNC (complete with polar relays) which I picked up from W2BVE (now W2JC) and a few miles of roll paper, ribbons and perforator tape.

Each year FLARC would head off to Blasberg’s Grove in Hawthorne for Field Day. That was a nice high spot. We had push-up masts and some simple yagis for VHF. I ran a lot of 2M AM from there on a Gonset Communicator (Gooney Box to most of us). Dipoles covered the low bands. I had never been in a tent until a FLARC Field Day. I don’t remember it well other than I got to stay up as late as I wanted – a big deal for a kid; and I remember operating 2M AM around midnight from a card table on a rocky bluff looking down on all the lights of Hawthorne and Fair Lawn.
IT WAS MAGIC!

For me, life changed in 1963 when my mother decided to move us up to Demarest. My ties to Fair Lawn and FLARC kept going however. I dated a Fair Lawn girl all through HS while I lived in Demarest. Fair Lawn was a long-distance telephone call from Demarest – if you can imagine such a thing, and I ran up quite a bill talking to her. I made very few FLARC meetings, but worked a lot of the FLARC members on Army MARS nets, just above 80 meters and above 2 meters. I also had a running sked with good old ‘no pa-ta-toes-today’ on 40 meters (CW of course) which we kept for years. I did introduce my HS guidance councilor, Frank Magyer, to FLARC and I believe he was an active member for many years.

Around The Shack (4)

1966-1970 I was off to college and off the air. I returned to Demarest, NJ in 1970, got married in 1971, moved to West Paterson, got back on the air and made a few FLARC meetings. FLARC had moved to the rec. center on River Road – the Ackerman estate had been demolished. I made one more Field Day – no longer at Blasberg's Grove. Carl had the "in" at Blasberg's and I think we lost our invitation when Carl departed. Blasberg's itself is now long gone.

I don't recall getting in much trouble (selective memory?). I missed out on a lot of what Fred described due, I suppose, to timing, because I would have been in the thick of it had I known.

The years have streaked by. Now I'm retired in GA and have a place in FL where I spend the winter. FLARC? I contribute to the newsletter and got a kick out of working W2JC the other day on FT8. The QSO was purely by chance… it was not a sked. Jim is in my first log book (W2BVE) and I still have the QSL card. I'm a FLARC life member if there is such a thing.

An editorial note: My mother was somewhat supportive of a young kid spending all his time in the attic and later the basement, but my aunt was not. "Harold, go out and play football or something – you are wasting your time down there and not meeting people." Carlton Bacon at FLARC also thought I was wasting my time on the air. My early FLARC and ham radio days led to a BSEE, an MS from MIT, and a great career in the aerospace industry. I was the lead EE on the HELLFIRE missile program and designed a swinging choke into the power supply. Some very sharp EEs on the program had never heard of one and wondered how I came up with it. Ham radio – that's how.

Despite my formal education, my ham background helped my career immensely. FLARC got me going on ham radio and that led to a rewarding career and life. I met my wife through ham radio as well. I will never, ever, try to stick a football or a golf club into the hands of a kid who wants to hold a soldering iron. We are all different – when you see interest, encourage it like Frank and Carl did for me.

73, Hal N4GG (WV2QPW, WA2QPW)

Dr. Barry Cohen K2JV Highlights Our September 21st FLARC Program With "*QRT-500 The Final Transmissions from UK Coastal Distress Watch Stations*" at The Fair Lawn Senior Center

What did early radio sound like? Dr. Cohen starts with history of the 500kHz system and the early Marconi stations. The discussion includes some interesting ships and examples of distress communications. The program concludes with the actual final CW transmissions between English, Irish and other European stations.

Barry Cohen was born in New York City and still maintains that he is a New Yorker. He was educated in the NYC public school system including the Bronx High School of Science. Barry continued his education at Brown University where he earned a BS degree in Electrical Engineering, and then at the Johns Hopkins University which conferred upon him the degree of Doctor of Engineering. During this period he also spent three years on active duty as an officer in the US Navy, holding the posts of Radar Officer, Electronics Officer and finally Navigator of a command and control flagship. During his Navy days he operated the Ham stations at many Naval Bases, including Treasure Island California, Pearl Harbor Hawaii, and the Air Force Base at Thule, Greenland.

His first Ham License was issued in 1945, W2PDG , and his first QSO occurred early in 1946, on 40 meter CW. He has been active, mostly on CW, ever since.

Upon graduation from Johns Hopkins, Dr. Cohen worked at Bell Laboratories Murray Hill for about 10 years. His research was on semiconductor devices and materials for use in high speed circuits. His most intriguing project was the development of the infrared solid state laser, a device used today in every CD and DVD player.

A Fulbright Fellow, Dr. Cohen founded Research Devices Inc. a New Jersey Corporation which manufactured and sold infrared and other equipment for manufacturing and failure analysis of semiconductor devices and integrated circuits.

Now retired, he works to establish ham radio related programs with school children, the Emergency Response Team established with NPARC, communications and space programs at elementary and high schools in New Jersey, and organizing communications for public events such as street fairs, road races, OEM exercises, Ham Radio summer camps, and others.

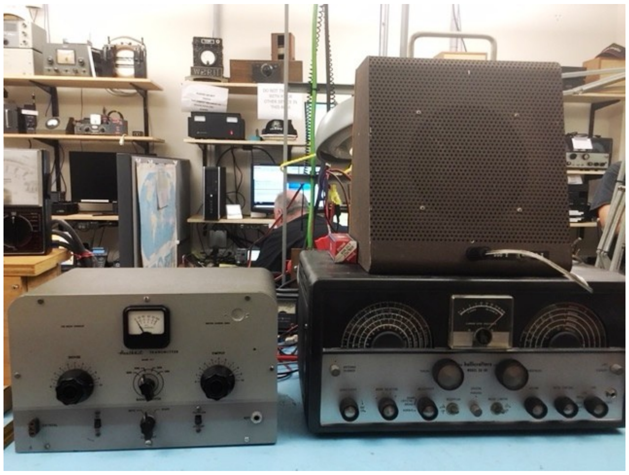
Vintage Night--August 17, 2018

The FLARC August program always focuses on a look back. This year Fred W2AAB put back on the air the original transmitter and receiver that was in the club station back in 1961. More than 40 members and guests packed into the clubhouse to hear Fred discuss the equipment and its operation and to get the station back on the air using his call. Despite its age, the gear worked decently and Fred managed two QSO'S -- a long ragchew with K4EWG in Georgia and with VE3AN in Ontario. The ops said we had a pile-up but the old receiver could not pull them in like it once did.

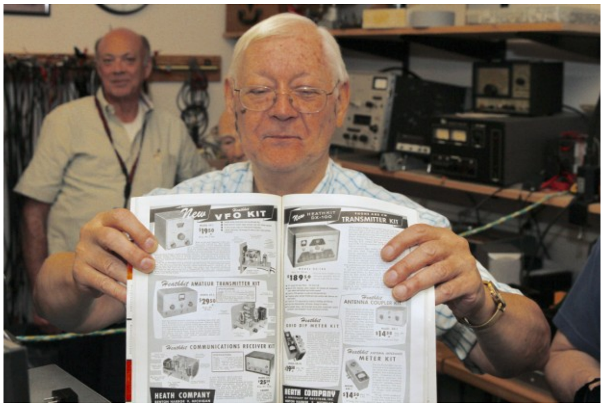
A great evening that brought back both memories for the old and lessons for the young. A big thanks to Fred and also to Karl W2KBF, Steve KA2BYX and the intrepid crew outside with the antenna -- braving on oncoming thunderstorm that forced a premature QRT.

TNX Don N2PRT for the pix

Fred W2AAB digs out VE3AN



The original FLARC station

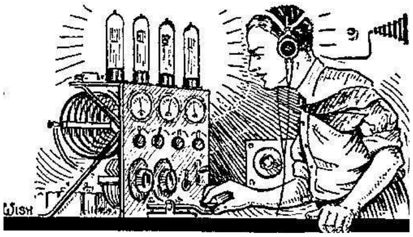


Fred holds up a period issue of QST showing the original equipment

Photos, texts and a live stream to Puerto Rico helped mark the historic event.

Vintage Night goes back to last Fall over lunch between Fred W2AAB and Ed WX2R. Along the way there were many who helped pull the night together from early ideas to the final moments of learning whether the station would get on the air or not. A thanks to Steve WA2BYX, Karl W2KBF, Brad KM2C, Larry WA2ALY and the intrepid crew of those working outside with the portable antenna including Kevin K2KCC doing his best Benjamin Franklin kite imitation.

With our "old-timers" round table in 2017 and Vintage Night in 2018, we would like to make the August program an annual "look back" event. Your ideas for 2019 are most welcome!!



The Way We Were -- The Art Of The QSL (Part 2)

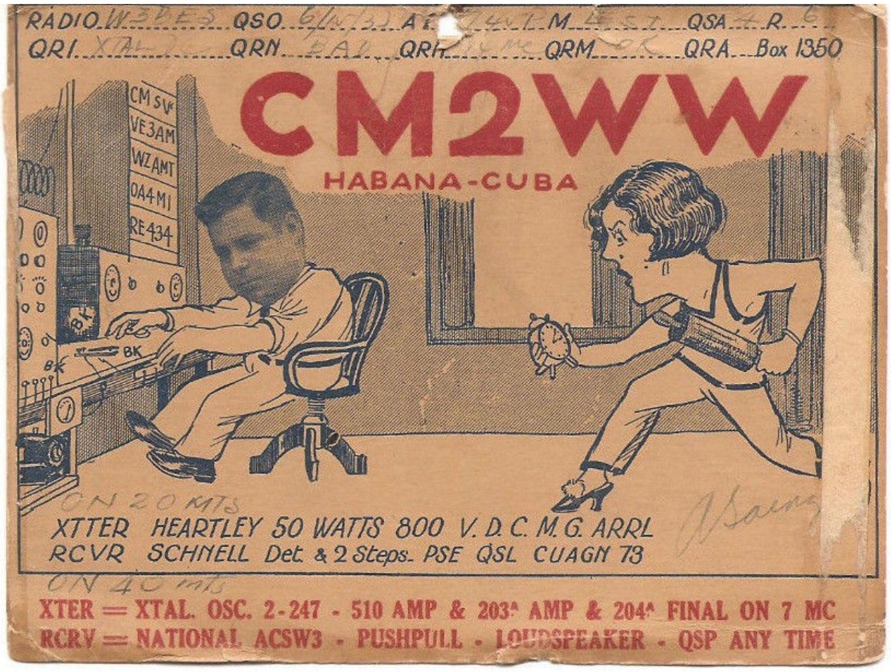
By Fred Belghaus W2AAB

This month we continue a multi-part series on QSL cards, their origin and evolution through amateur radio history

Image from May, 1926 QST, courtesy ARRL

One of the most popular formats for QSL artwork is the cartoon. Last month, we looked at some from our own country, but what about those from our DX friends? Do they all follow pretty much the same themes as ours?

Here's a common theme, appearing on a card from Cuba, dated 1933. The ham is being "harried" by his "better half," clock and rolling pin in hand, for spending too much time playing radio.



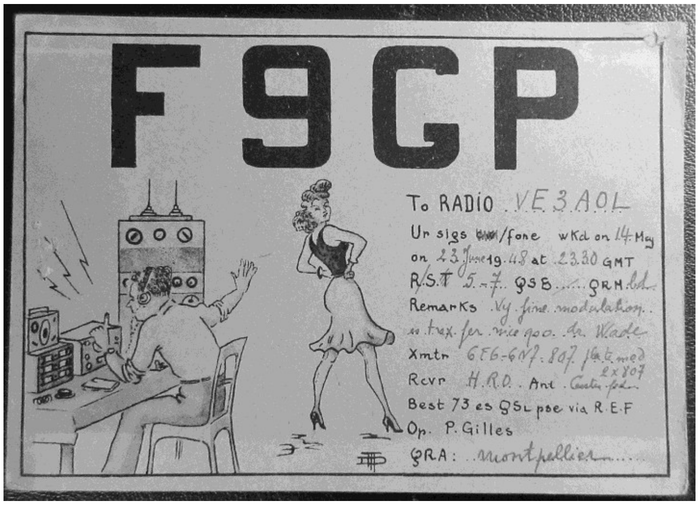
RADIO W3BES QSO 6/4/33 AT 7:40 P.M. E.S.T. QSA 4 R 6
QRI XTAL DC QRN BAD QRH 14 MC QRM OK QRA Box 1350

CM2WW

HABANA-CUBA

ON 20 MTS
XTTER HEARTLEY 50 WATTS 800 V. D. C. M. G. ARRL
RCVR SCHNELL Det. & 2 Steps. PSE QSL CUAGN 73
ON 40 mts
XTER = XTAL. OSC. 2-247 - 510 AMP & 203A AMP & 204A FINAL ON 7 MC
RCRV = NATIONAL ACSW3 - PUSHPULL - LOUDSPEAKER - QSP ANY TIME

I'll bet there are a few of you who can relate to that. Here's another example, from France, dated 1948.



F9GP

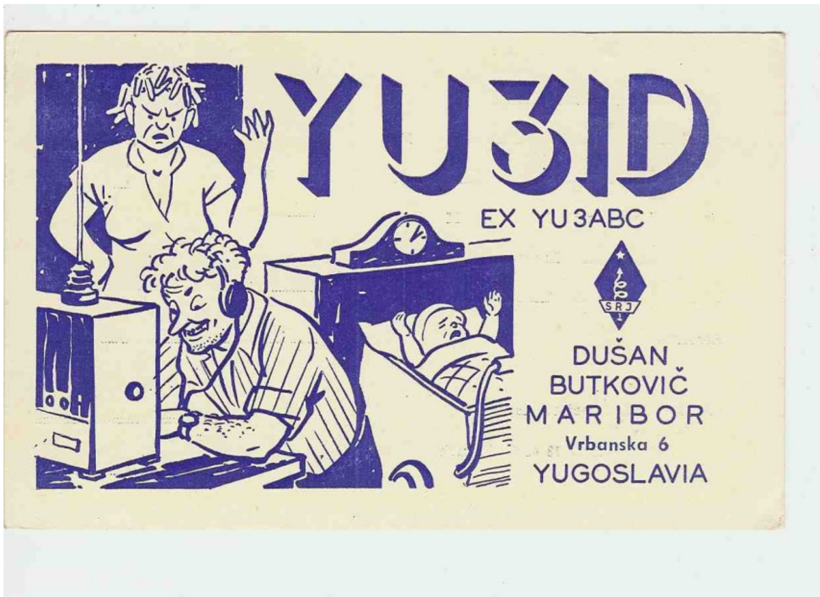
To RADIO VE3AOL
Ur sigs ~~cw~~/fone wkd on 14 Mcy
on 23 June 1948 at 23.30 GMT
R.S.T 5-7 QSB ..... QRM ld
Remarks Vy fine modulation
es tnx fer nice qso. dr Wade
Xmtr 6F6-6N7-807 plate mod 2x807
Rcvr H.R.O. Ant Center fed
Best 73 es QSL pse via R.E.F
Op. P. Gilles
QRA: montpellier

The Way We Were (2)

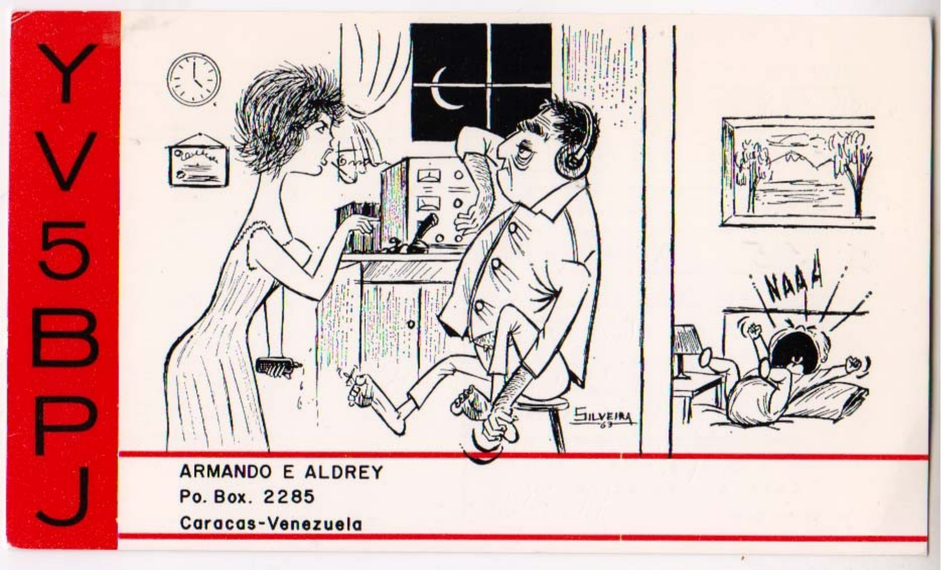
The wife, trying her best to get the attention of her "other half," is rebuffed in preference to the rig. And I always thought Frenchmen were supposed to be such great lovers. Well, maybe, but only after the band goes out and there's no more DX to work.

We mustn't assume that this situation is unique to those of us in the West. Here's an example from YU3ID in Maribor in the former Yugoslavia (now Slovenia), from 1964.

The "rabid" operator is shown ignoring both his crying infant and obviously agitated and rather fierce-looking XYL.

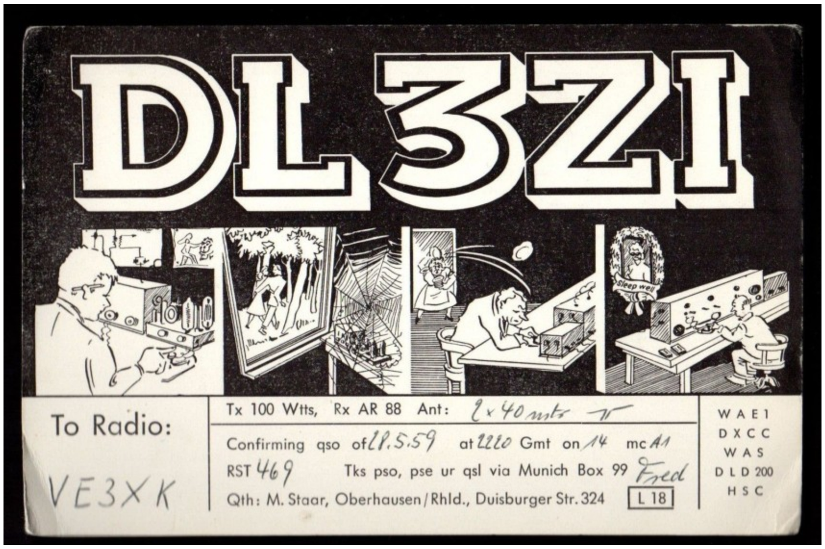


A very similar theme appears on this 1965 card from Caracas, Venezuela.



The Way We Were (3)

Here's an unusual, more philosophical approach to the "problem" faced by avid hams, this time from Germany. The year was 1959.



DL3ZI

To Radio: VE3XK

Tx 100 Wtts, Rx AR 88 Ant: 2 x 40 mtr

Confirming qso of 28.5.59 at 2220 Gmt on 14 mc A1

RST 469 Tks pso, pse ur qsl via Munich Box 99 Fred

Qth: M. Staar, Oberhausen/Rhld., Duisburger Str. 324 L 18

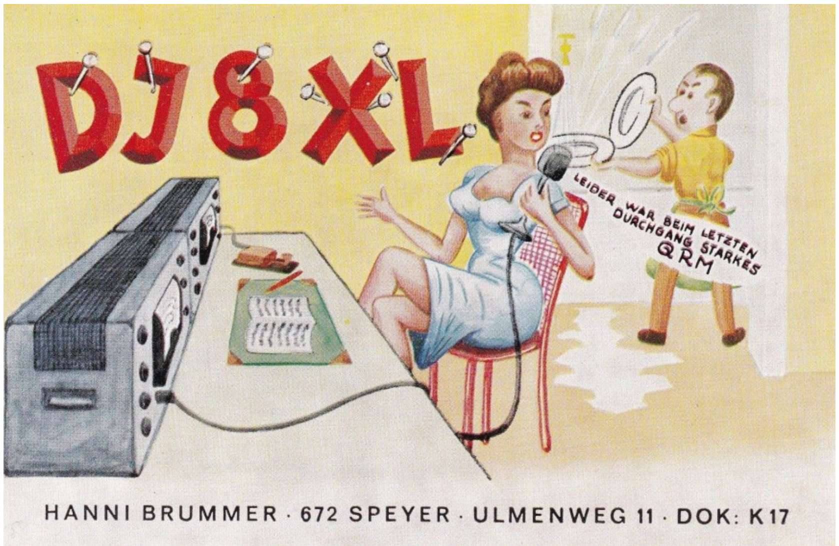
W A E 1
D X C C
W A S
D L D 200
H S C

The ham starts out having a great time operating his rig as a youth. Then, he's busy courting his ladylove and abandoning, at least temporarily, his beloved rig. Then, as a married man, the wife, resenting his time back on the rig, hurls a piece of china in his direction. The final image shows the ham, now a widower, once again enjoying his true love, first and always—his rig.

We've seen that this is a universal situation: the endless battle between man, his rig, and his "better half." Perhaps, gentlemen, we ought to defer more often to those who love us, rather than to that lifeless pile of junk that is our electronic toy!

But here's a very different approach, illustrating the principle "turnabout is fair play." This time, it's the ladies who get their revenge, by instead of fighting our obsession, joining it. The result is ingenious.

The card is from Germany, printed sometime in the 1960s, and it is one of my personal favorites:



DJ8XL

HANNI BRUMMER · 672 SPEYER · ULMENWEG 11 · DOK: K17

LEIDER WAR BEIM LETZTEN DURCHGANG STARKES QRM

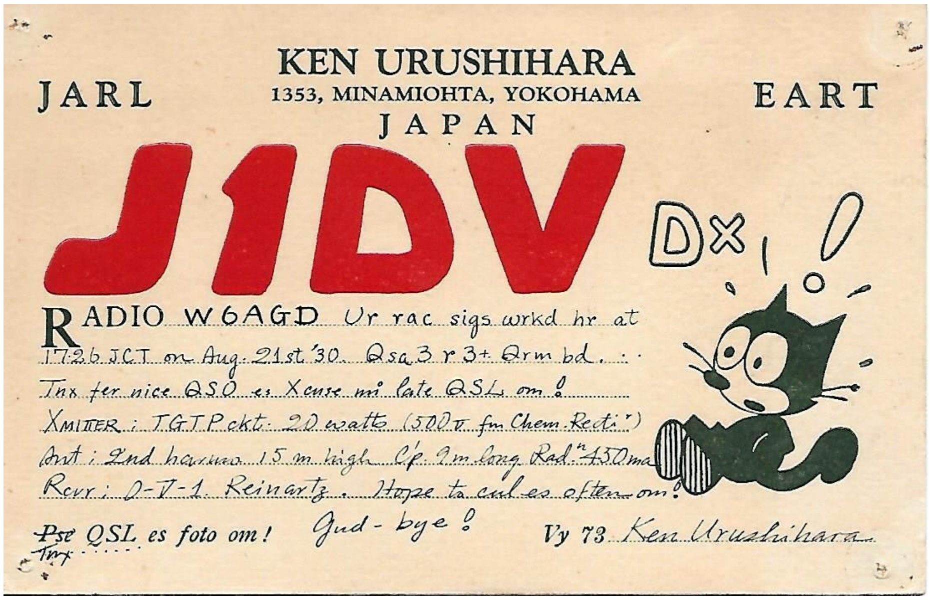
The Way We Were (4)

The wife is the ham this time, enjoying a QSO while her “other half” is washing the dishes, and apparently making a lot of noise while doing so. She is responding to her contact with a complaint about him. The German text translates as: “I’m sorry, but there was strong QRM during the last exchange.” (Many thanks to Karl, W2KBF, for providing the translation).

<><><><><>

In Part 1 of this series, we saw examples of popular cartoon characters appearing on quite a few American QSL cards. It is surprising to discover that these characters also appear on many foreign cards, as well.

Felix the Cat, Popeye, and especially Mickey Mouse seem to be the most frequently seen. Here are a few examples from around the world. The first is from Japan, dated 1930, portraying Felix the cat:



JARL KEN URUSHIHARA EART

1353, MINAMIOHTA, YOKOHAMA

JAPAN

J1DV

RADIO W6AGD Ur rac sigs wrkd hr at

1726 JCT on Aug. 21st '30. Qsa 3 r 3+ Qrm bd. .

Tnx fer nice QSO es Xcuse mi late QSL om!

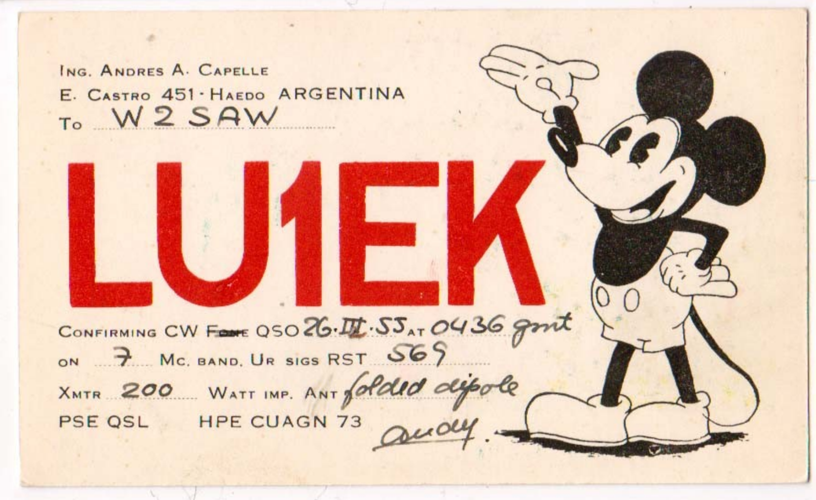
Xmitter: TGTP ckt: 20 watts (500v fm Chem. Recti")

Ant: 2nd harmo 15 m high Cp. 9 m long Rad" 450 ma

Rcvr: 0-V-1. Reinartz. Hope to cul es often om!

~~Pse~~ Tnx QSL es foto om! Gud-bye! Vy 73 Ken Urushihara

Here’s Mickey, on a card from Argentina, dated 1955:



Ing. Andres A. Capelle

E. Castro 451 · Haedo ARGENTINA

To W2SAW

LU1EK

Confirming CW ~~Fone~~ QSO 26·III·55 at 0436 gmt

on 7 Mc. band. Ur sigs RST 569

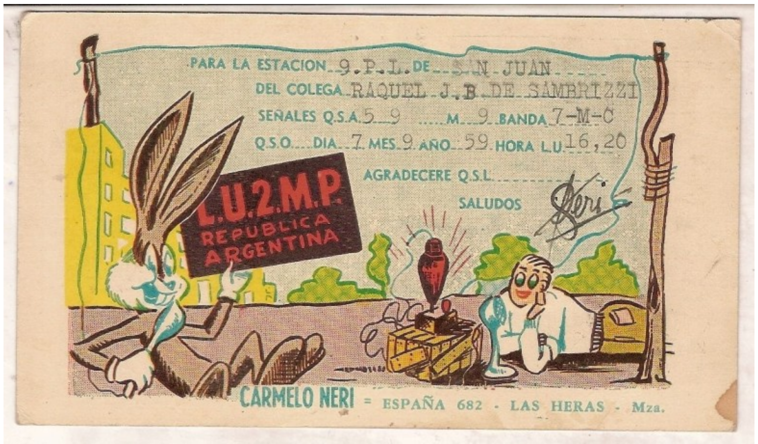
Xmtr 200 Watt imp. Ant folded dipole

PSE QSL HPE CUAGN 73

Andy.

The Way We Were (5)

Bugs Bunny was clearly known in Argentina, too, as demonstrated by this card from 1959:

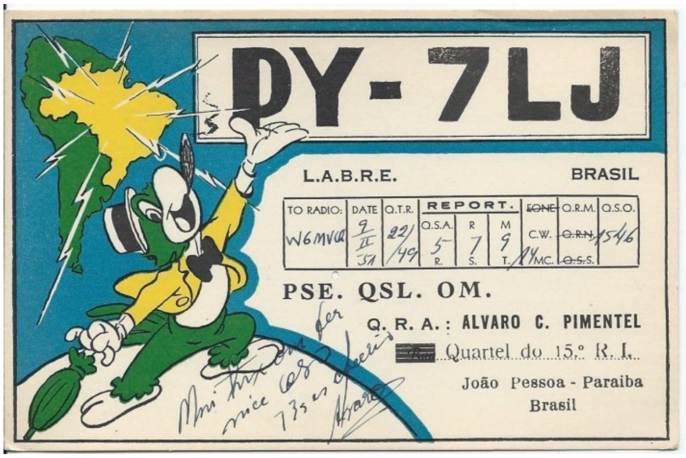


PARA LA ESTACION 9.P.L. DE SAN JUAN
DEL COLEGA RAQUEL J. B DE SAMBRIZZI
SEÑALES Q.S.A. 5 9 M. 9 BANDA 7-M-C
Q.S.O. DIA 7 MES 9 AÑO 59 HORA L.U. 16,20
AGRADECERE Q.S.L.
SALUDOS Neri

L.U.2.M.P.
REPUBLICA ARGENTINA

CARMELO NERI = ESPAÑA 682 - LAS HERAS - Mza.

Even Jiminy Cricket makes his appearance, this time from Brazil in 1951:



DY-7LJ

L.A.B.R.E. BRASIL

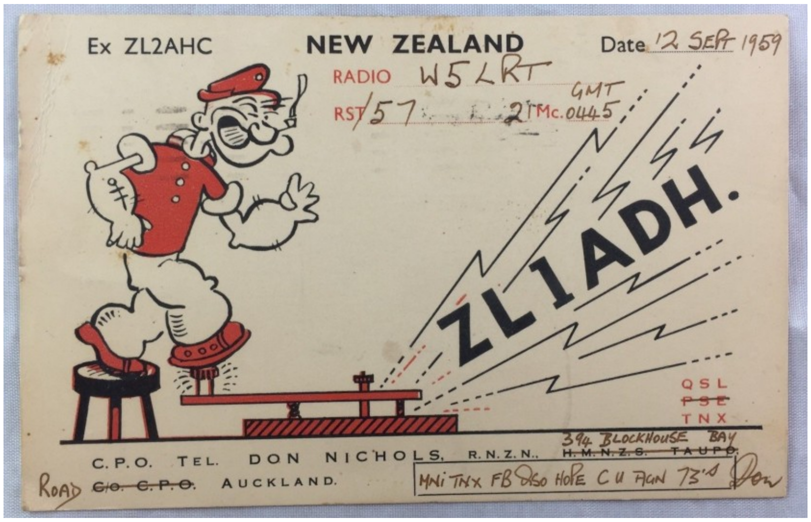
TO RADIO:	DATE	Q.T.R.	REPORT. Q.S.A. R.	R S.	M T.	~~FONE~~ C.W. MC.	Q.R.M. ~~Q.R.N.~~ ~~Q.S.S.~~	Q.S.O.
W6MVQ	9/II/51	22/49	5	7	9	14		1546

PSE. QSL. OM.

Q. R. A.: ALVARO C. PIMENTEL
~~Rua~~ Quartel do 15.º R. I.
João Pessoa - Paraiba
Brasil

Mni tnx om fer nice QSO 73s es cheers Alvaro

Last but not least, here’s Popeye, pounding the brass at ZL1ADH in Auckland, New Zealand, in 1959:



Ex ZL2AHC NEW ZEALAND Date 12 SEPT 1959
RADIO W5LRT
RST 57 21 Mc. GMT 0445

ZL1ADH.

QSL
~~PSE~~
TNX

C.P.O. TEL. DON NICHOLS, R.N.Z.N., 394 BLOCKHOUSE BAY ~~H.M.N.Z.S. TAUPO.~~
ROAD ~~C/o. C.P.O.~~ AUCKLAND.

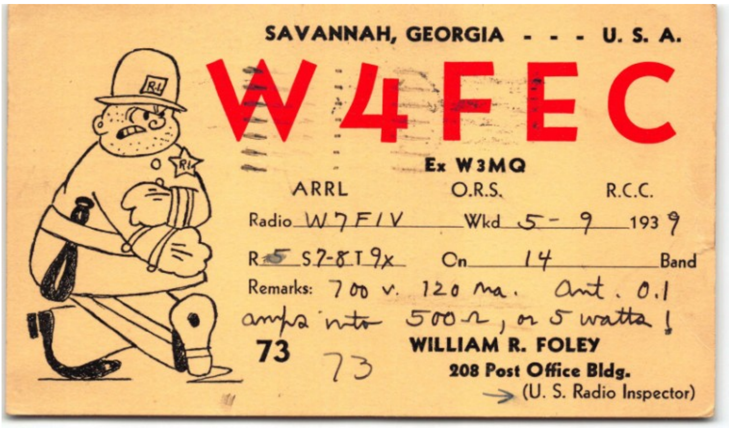
MNi TNX FB QSO HOPE CU AGN 73's Don

The Way We Were (6)

But we hams can also poke fun at ourselves, and express this spirit on our QSL cards.

Beginning in the early days of amateur radio, the Department of Commerce licensed and regulated all radio communications, commercial and amateur. Later, the F.R.C. (Federal Radio Commission) was given this responsibility, until the Communications Act of 1934 established the F.C.C. In those days, before there was a Field Engineering Bureau, the local enforcement agent was the F.C.C.'s "R.I." (Radio Inspector). These worked in the field, inspecting ham and commercial stations to insure compliance with technical standards and to investigate violations of radio laws.

The image of the "R.I." as a kind of "radio cop" is portrayed here on a QSL from one of these Radio Inspectors, W4FEC, in 1939:



SAVANNAH, GEORGIA - - - U. S. A.

W4FEC

Ex W3MQ

ARRL O.R.S. R.C.C.

Radio W7FIV Wkd 5 - 9 1939

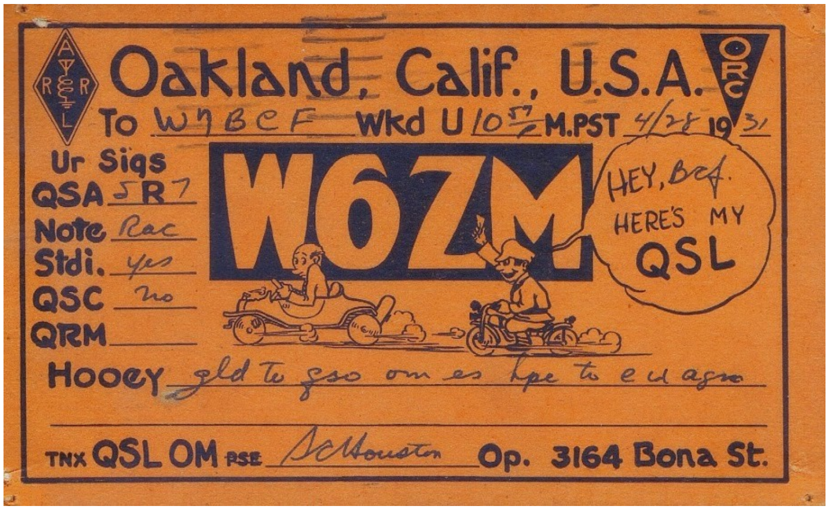
R 5 S 7-8 T 9x On 14 Band

Remarks: 700 v. 120 ma. Ant. 0.1 amps into 500 Ω, or 5 watts!

73 73

WILLIAM R. FOLEY
208 Post Office Bldg.
→ (U. S. Radio Inspector)

Here, W6ZM is being pursued in his roadster by a traffic cop, the name of whom corresponds with the name of the person worked. The card is from 1931:


A R R L
ORC
HEY, Bcf.
HERE'S MY
QSL

Oakland, Calif., U.S.A.

To W7BCF Wkd U 10 57 M.PST 4/28 1931

W6ZM

Ur Sigs
QSA 5 R 7
Note Rac
Stdi. yes
QSC no
QRM

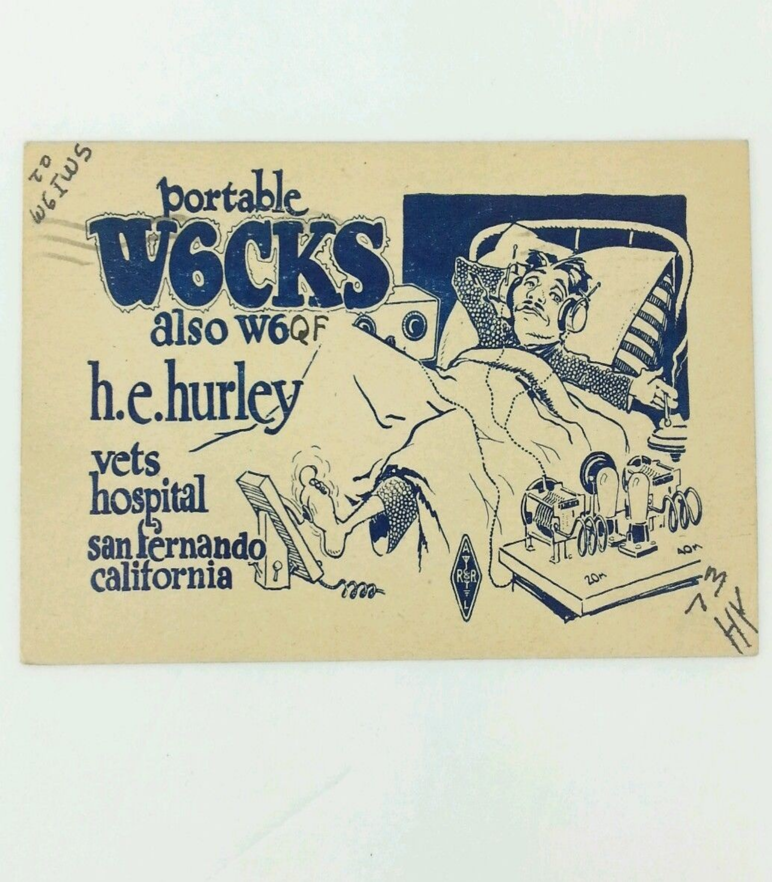
Hooey gld tu qso om es hpe to cu agn

TNX QSL OM PSE S C Houston Op. 3164 Bona St.

The Way We Were (7)

W6CKS was the "portable" call of W6QF. Here, the operator captured his stay at the San Fernando Veteran's Hospital on this card from 1934. Note that the transmitter is a breadboard constructed Hartley oscillator, a rather primitive, but inexpensive, one tube CW transmitter, common in the early to mid 1930s.

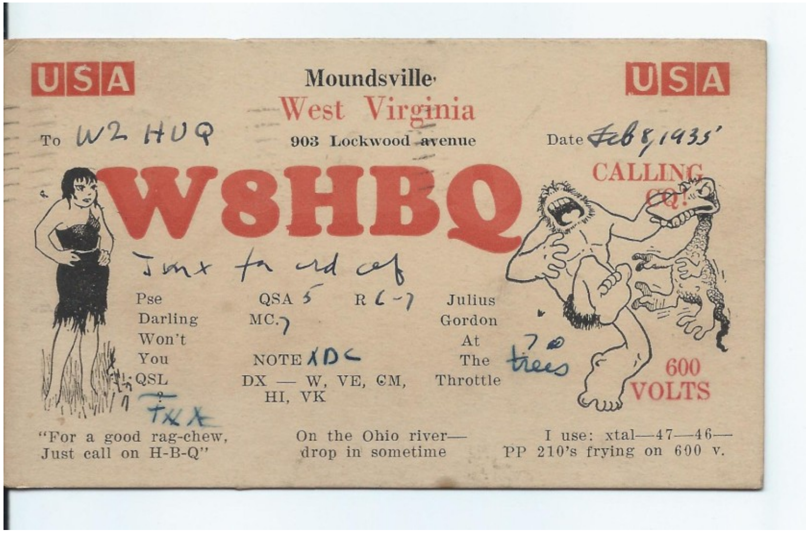
The operator is sending CW with his left foot (a self-deprecating reference to his poor sending):



To W6TWS

portable
W6CKS
also W6QF
h.e.hurley
vets
hospital
san fernando
california

Riffing on the ageless battle between the sexes, "caveman" W8HBQ is battling a prehistoric beast (unsuccessfully), while his "better half" looks on, disapprovingly, on this QSL from 1935:



USA Moundsville USA
West Virginia
To W2 HUQ 903 Lockwood avenue Date Feb 8, 1935

W8HBQ

CALLING CQ!

Tnx fr ur crd

Pse Darling Won't You QSL ? FXX

QSA 5 R 6-7
MC. 7
NOTE XDC
DX — W, VE, CM, HI, VK

Julius Gordon At The Throttle 7o trees

600 VOLTS

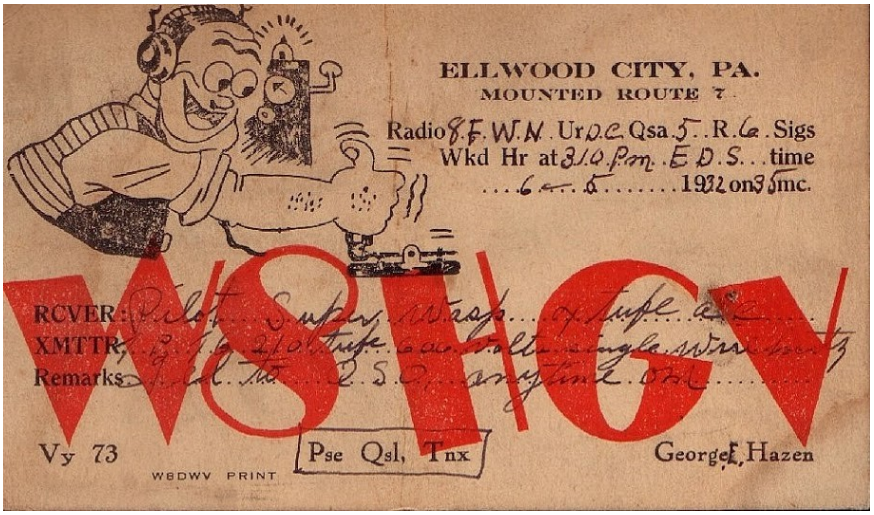
"For a good rag-chew, Just call on H-B-Q"

On the Ohio river— drop in sometime

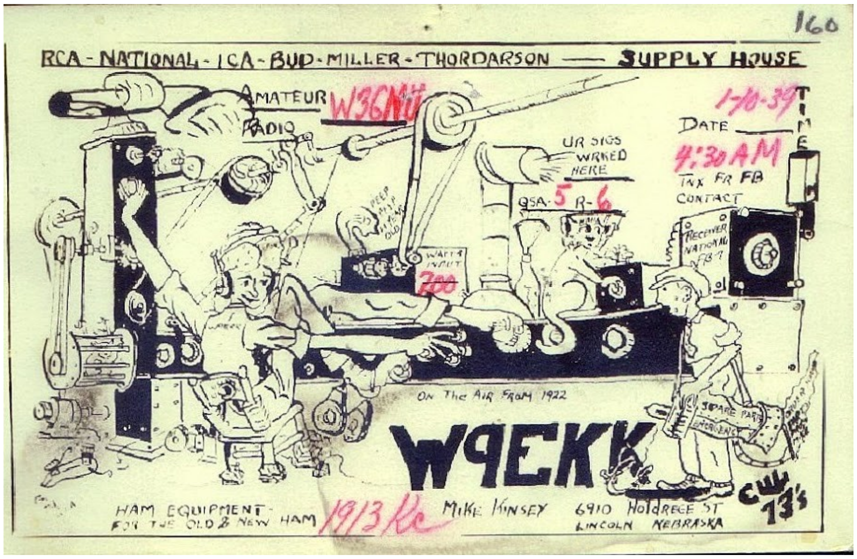
I use: xtal—47—46— PP 210's frying on 600 v.

The Way We Were (8)

Meanwhile, W8HGV literally “pounds the key” in Ellwood City, PA, in 1932 (when Western PA was in W8 land):



Imitation, so goes the old cliché, is the sincerest form of flattery. Here’s a cartoon design in imitation of the famous cartoon character Rube Goldberg, from W9EKK in 1929:

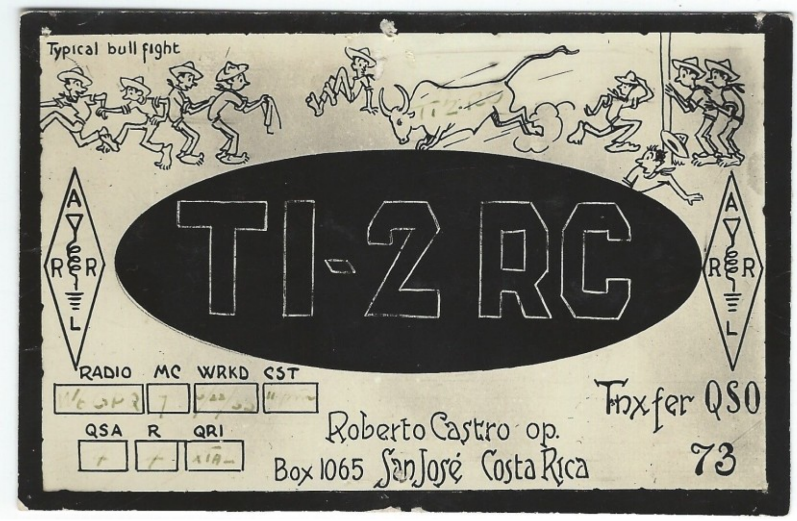


As in the Rube Goldberg cartoons, the rig is a preposterous collection of junk, chiefly mechanical, cobbled together in haphazard fashion and at least partially driven by a small, overworked animal to produce the desired result—in this case, a working rig. A very clever concept, and not too far from the truth in many ham shacks, then and now.

The Way We Were (9)

Switching gears, and going back to DX land, here's an unusual card from TI2RC, San Jose, Costa Rica dated 1935.

This time, the subject isn't amateur radio, though. It illustrates a "typical bullfight," showing a group of wannabe matadors hoping to challenge El Toro, but not quite being up to the task, many of them running for their lives.



Typical bull fight

TI-2RC

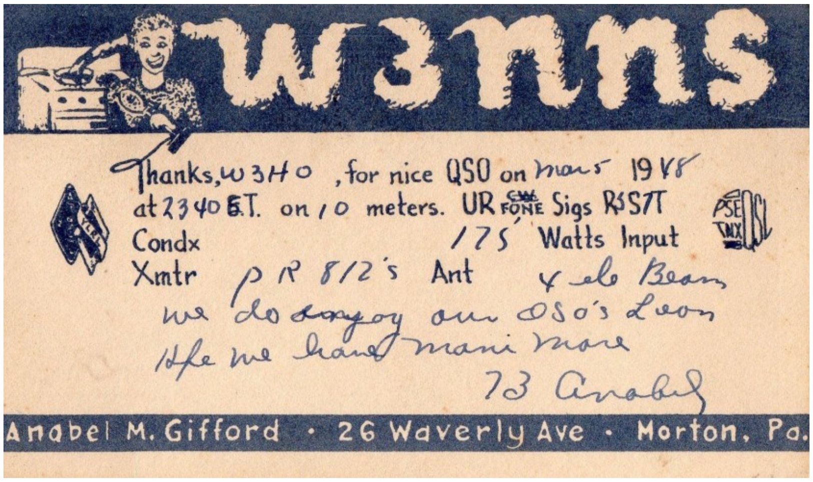
RADIO [illegible] MC 7 WRKD [illegible] CST [illegible]

QSA [illegible] R [illegible] QRI [illegible]

Roberto Castro op.
Box 1065 San José Costa Rica

Tnx fer QSO
73

The ladies among us have a sense of humor about themselves, too, as can be seen in this card from W3NNS in 1948:



W3NNS

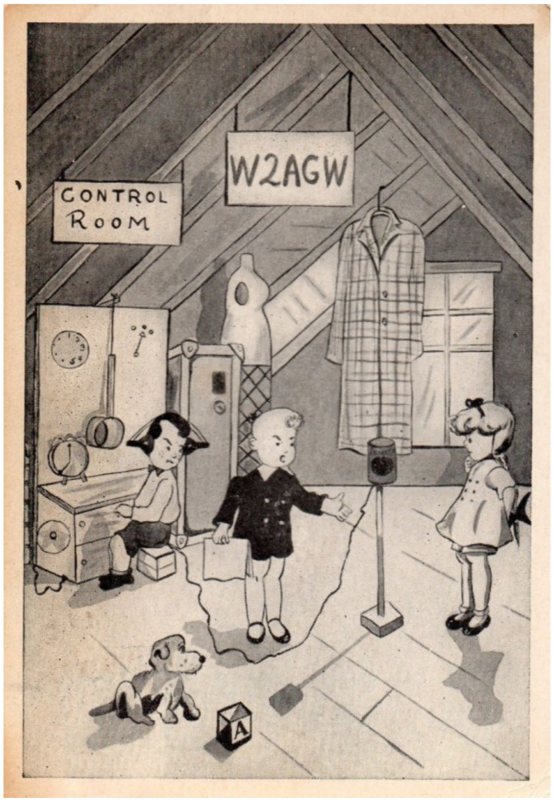
Thanks, W3HO , for nice QSO on mar 5 1948
at 2340 E.T. on 10 meters. UR CW FONE Sigs R5S7T
Condx 175 Watts Input
Xmtr PR 812's Ant 4 ele Beam
we do ~~anyoy~~ enjoy our QSO's Leon
Hope we have mani more
73 Anabel

Anabel M. Gifford · 26 Waverly Ave · Morton, Pa.

If you look closely, the operator, Anabel, is seen posing with a grin and holding a mirror, while the cooking on the stove burns to a smoky crisp, the clouds of smoke forming her call letters. Very clever!

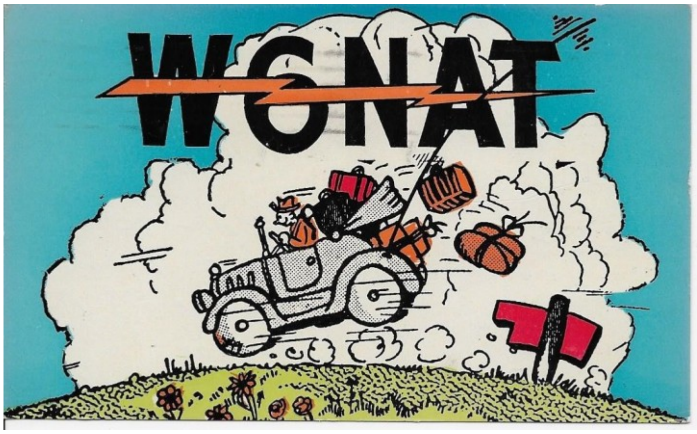
The Way We Were (10)

Here, on this 1950 card, famous DXer W2AGW pokes fun at his attic “radio station,” run by kids:



Mobile operating started in the late 1920s, with very bulky, rather primitive portable equipment by today’s standards. It became somewhat more popular in the 1930s, with most of the mobile stations equipped with VHF transceivers for the 2-1/2 and 5 meter bands. By the 1940s, despite being interrupted by World War II, hams again took to the highways and byways for more mobile activity, mainly on the 10 meter band (probably because 10 was the first band re-opened after the War ended in 1945). This continued well into the 1960s, after which VHF became more popular again with mobileers.

Here’s a beautiful card from 1949, showing W6NAT in his mobile, tooling along, oblivious to the fact that much of his baggage is flying out the back:



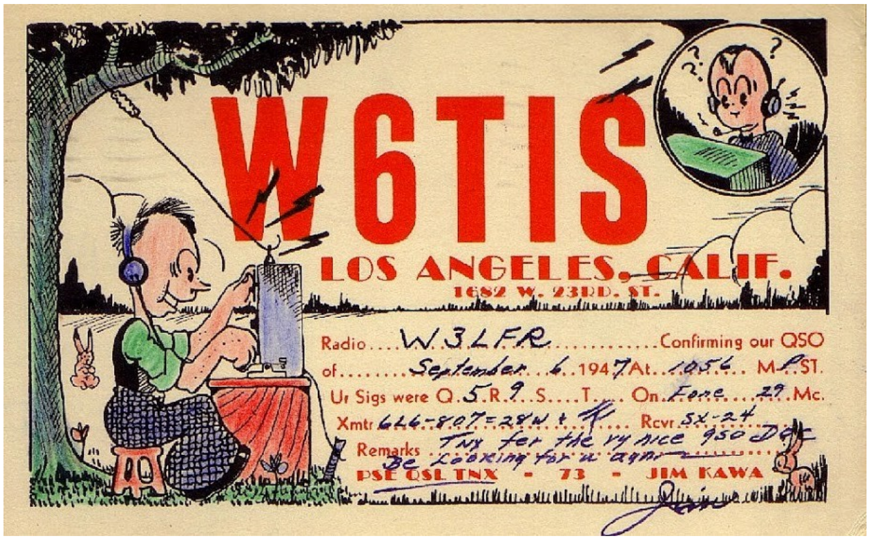
The Way We Were (11)

The card is unsigned. But it is one of the best I've seen from any period. It confirms a contact on 10 meter phone, using a homebrew transmitter and modulator, the rig running "52.5 watts," and a receiving converter that would have used the car's broadcast radio as a tunable IF stage. That was a typical mobile installation in those days!

So far, I have avoided including cards that use card printer's "standard cuts" for illustrations, instead preferring original designs because they are usually much more imaginative, as well as unique.

Here's one card that has been made unique by the operator's having hand-colored the images on a standard print. The result is quite striking.

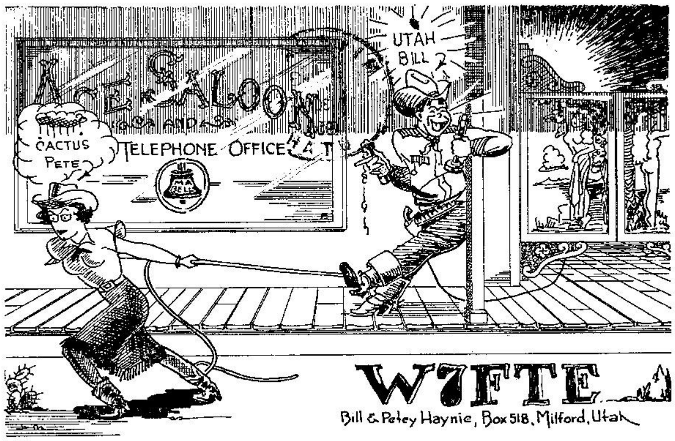
The station call is W6TIS of Los Angeles, and the card dates from September, 1947. It confirms a contact on 10 meter phone. The operator is shown running a portable station with a simple wire antenna and a makeshift ground, while the operator at the other end of the contact seems mystified by the guy's signal—or maybe he's just too weak to copy:



W6TIS
LOS ANGELES, CALIF.
1682 W. 23RD. ST.

Radio W.3LFR Confirming our QSO
of September 6 1947 At 1056 M P ST.
Ur Sigs were Q.5 R.9 S. T. On Fone 29 Mc.
Xmtr 6L6-807=28W + [illegible] Rcvr SX-24
Remarks Tnx for the vy nice 950 D[illegible]
Be looking for u agn
PSE QSL TNX - 73 - JIM KAWA
Jim

Here's some really fine workmanship on a card from W7FTE dated 1950:

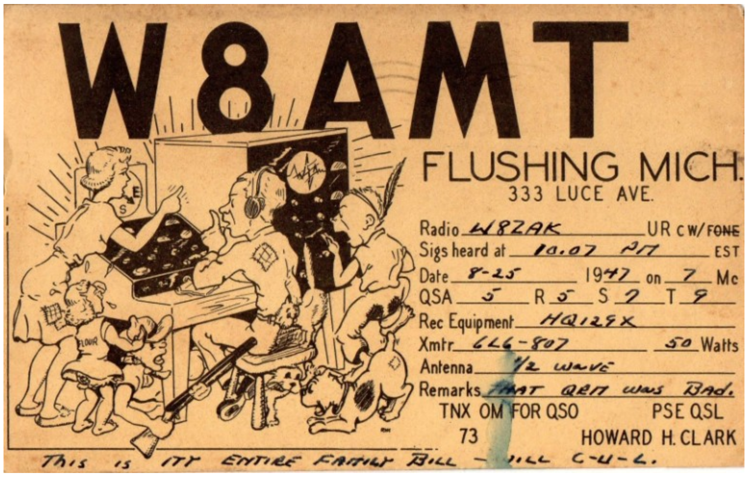


W7FTE
Bill & Petey Haynie, Box 518, Milford, Utah

Operator "Utah Bill" is being lassoed by his XYL, "Petey" ("Cactus Pete"), for hanging out in a less than savory saloon with rig inside. One can only guess what will happen to Pete once his "better half" gets him back to the ranch!

The Way We Were (12)

Here we have a sort of “domestic comedy,” not unlike the themes of TV sitcoms. Dad, at the rig, is surrounded by a chaotic home life. The card is dated 1947, and comes to us from station W8AMT, artist unknown:



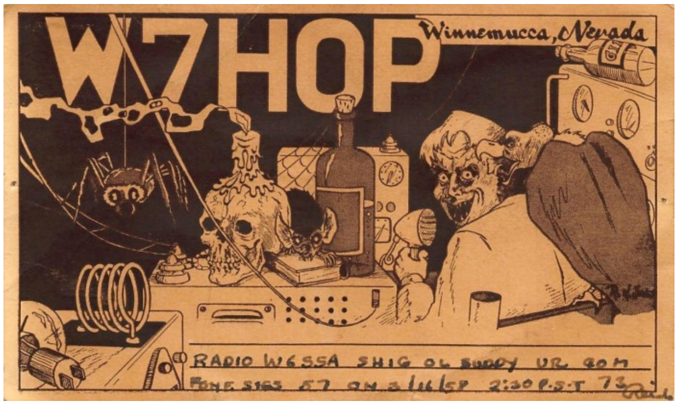
W8AMT

FLUSHING MICH.
333 LUCE AVE.

Radio W8ZAK UR CW/~~FONE~~
Sigs heard at 10.07 PM EST
Date 8-25 1947 on 7 Mc
QSA 5 R 5 S 7 T 9
Rec Equipment HQ129X
Xmtr 6L6-807 50 Watts
Antenna 1/2 wave
Remarks That QRM was Bad.
TNX OM FOR QSO PSE QSL
73 HOWARD H. CLARK

This is my entire family Bill - will C-U-L.

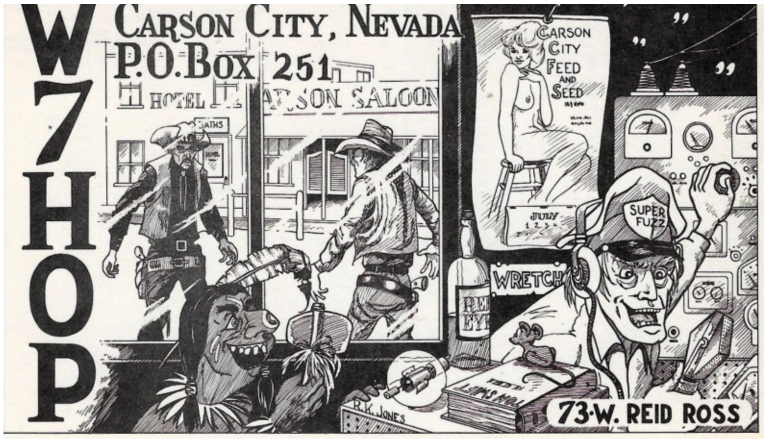
Here’s a bizarre entry from W7HOP, Winnemucca, Nevada, 1958:



W7HOP Winnemucca, Nevada

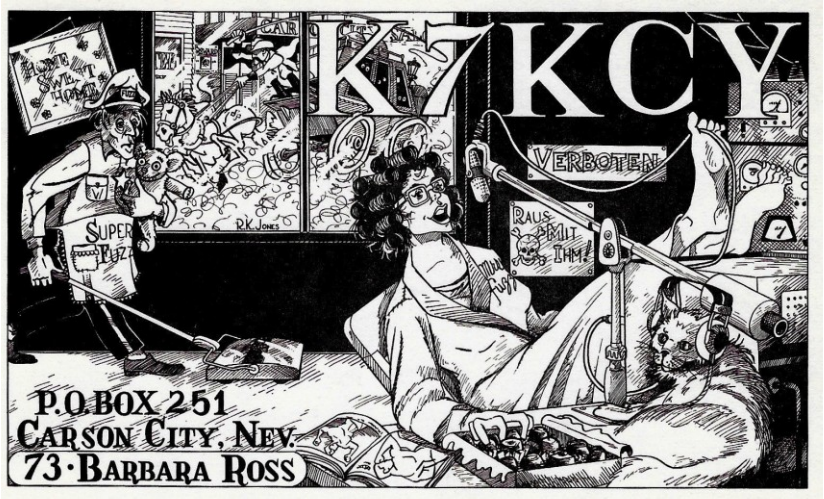
RADIO W6SSA SHIG OL BUDDY UR 40M
FONE SIGS 57 ON 3/16/58 2:30 P.S.T 73

In the late 1950s and early ‘60s, there was a peculiar fascination with vampires and zombies in popular culture. W7HOP’s card seems to reflect that. W7HOP offers another cartoon example, eleven years later, on a 1969 card:

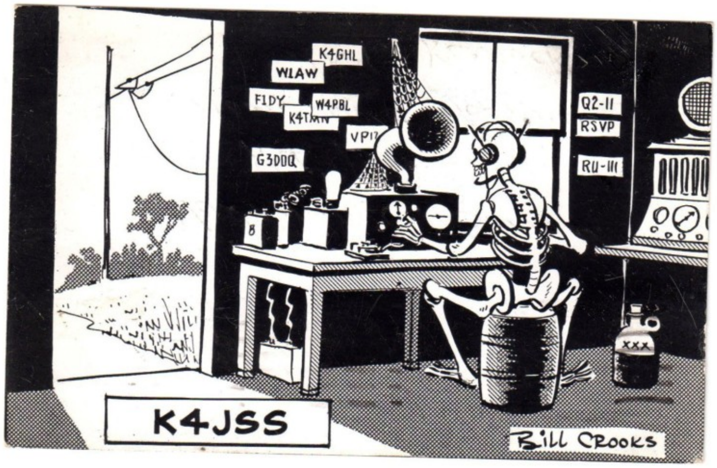


The Way We Were (13)

XYL Barbara’s card is another fine example of the work of artist R.K. Jones:



Another bizarre example is this 1962 card from K4JSS, Orlando, Florida, by artist Bill Crooks

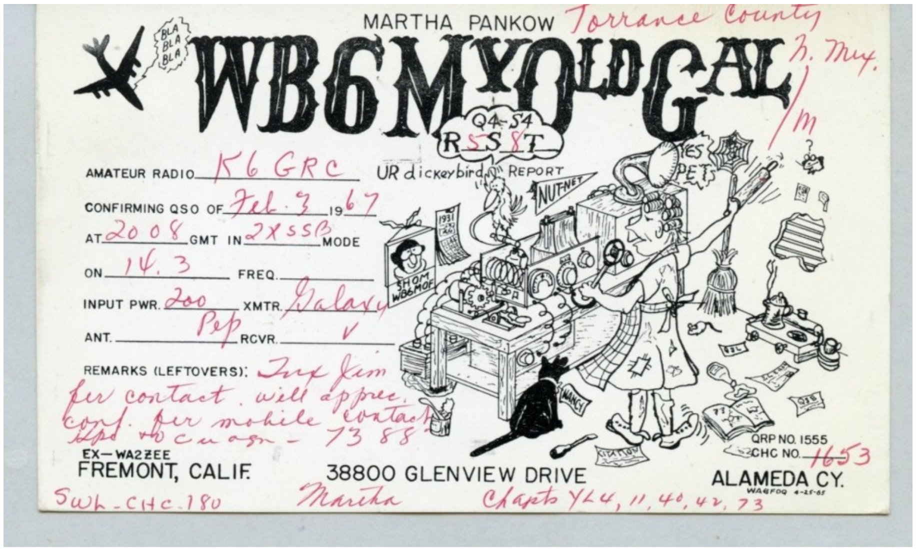


Next, we see Martha, WB6MOG poking fun at her own station, and herself on a 1967 card drawn by WA6FOQ. The picture shows Martha at her haywire station, working her OM, WB6MOF, who is up in the “wild, blue yonder,” piloting his airplane. The house, meanwhile, has been sadly neglected.

The calendar has not been changed since 1931, a spider web hangs above an unused broom, a mouse peers out from a hole in the wall while another creeps along the floor. A chunk of plaster has fallen off the wall, a bottle of a half-consumed beverage litters the floor along with neglected QSL cards, an open magazine, a screw driver, and a half-eaten can of food. Martha’s cat, Nancy, looks on, no doubt bewildered by it all.

The Way We Were (14)

Talk about self-deprecating humor! Here it is:



MARTHA PANKOW Torrance County N. Mex. /M

WB6MYOLDGAL

Q4-S4
R S 8 T
UR dickeybird REPORT

AMATEUR RADIO K6GRC

CONFIRMING QSO OF Feb. 3 1967

AT 2008 GMT IN 2X SSB MODE

ON 14.3 FREQ.

INPUT PWR. 200 Pep XMTR. Galaxy

ANT. RCVR. V

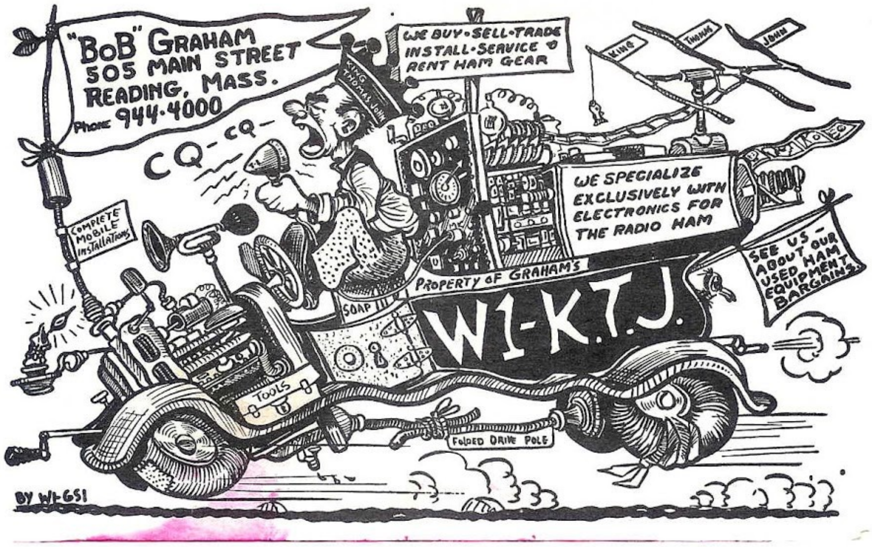
REMARKS (LEFTOVERS): Tnx Jim fer contact. will apprec. conf. fer mobile contact hpe to cu agn - 73 88

EX—WA2ZEE
FREMONT, CALIF. 38800 GLENVIEW DRIVE ALAMEDA CY.

QRP NO. 1555
CHC NO. 1653

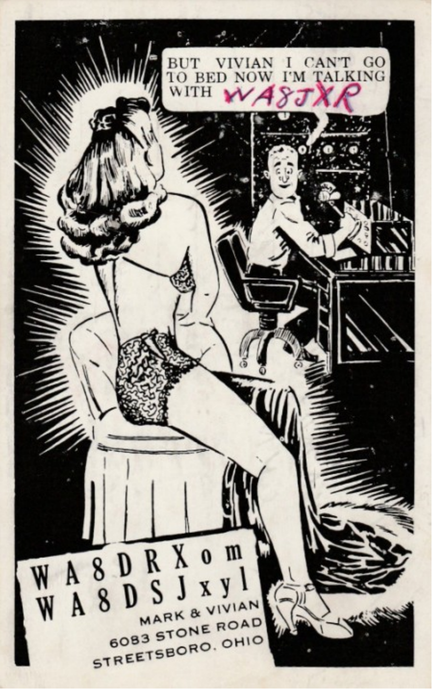
SWL-CHC-180 Martha Chapts YL4, 11, 40, 42, 73

Bob Graham, W1KTJ, was a dealer in amateur radio equipment in the 1950s. Here's his card, serving as a QSL and a form of advertising:

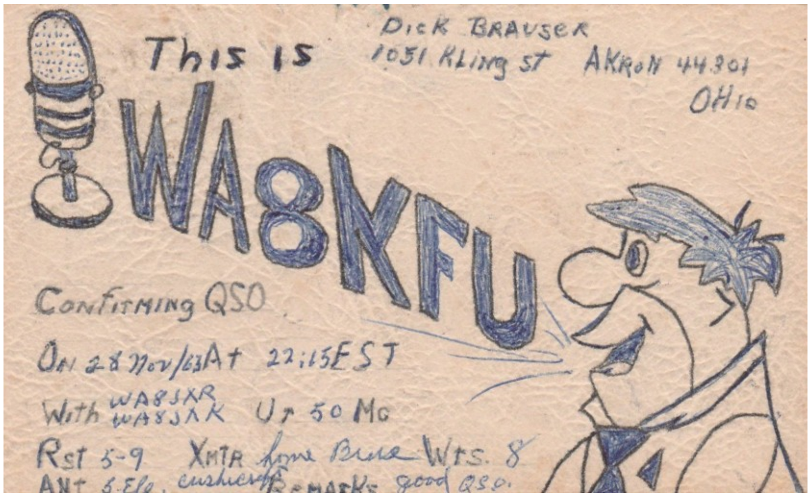


The Way We Were (15)

Here's another variation on the male-female conflict, on the QSL of Mark, WA8DRX, dated 1963, which I submit without further comment:



Our final example this month is a well-executed, home-drawn card from WA8KFU in 1963, confirming a QSO on 6 meters. It is a playful look at the once-popular TV cartoon character, Fred Flintstone:



Dick Brauser
1051 Kling St Akron 44301
Ohio

Confirming QSO
On 28 Nov/63 At 22:15 EST
With WA8JXR WA8JXK Ur 50 Mc
Rst 5-9 Xmtr home Brew Wts. 8
Ant 5 Ele. cushcraft Remarks good QSO.

All together now…"Yabba dabba DOO!"

Before signing off for the month, here's a closing thought, from an old Tatar proverb (*):

"To make my future bright, I reach for the fire of the past."

(*) From: www.everyculture.com/wc/Norway-to-Russia/Tatars.html

Does Anyone Really Know What Time It Is?

The latest federal government debate over continuing funding for radio stations WWV, WWVH and WWVB may not arouse the interest of many hams, but it should.

The ARRL reported that "ARRL members and Amateur Radio clubs are expressing increased concern over the inclusion of WWV and WWVH on a list of proposed cuts in the White House's National Institute of Standards and Technology (NIST) Fiscal Year 2019 budget request. The proposed cuts also would include the Atomic Clock signal from WWVB used to synchronize specially equipped clocks and watches."[2]

But maybe that is not the whole story. There are additional details about the federal budget proposal on the Hackaday website. "Buried on page 25 of the 2019 budget proposal for the National Institute of Standards and Technology (NIST), under the heading "Fundamental Measurement, Quantum Science, and Measurement Dissemination", there's a short entry that has caused plenty of debate and even a fair deal of anger among those in the amateur radio scene:

> NIST will discontinue the dissemination of the U.S. time and frequency via the NIST radio stations in Hawaii and Ft. Collins, CO. These radio stations transmit signals that are used to synchronize consumer electronic products like wall clocks, clock radios, and wristwatches, and may be used in other applications like appliances, cameras, and irrigation controllers."[3]

The radio station WWV is the oldest continuously operating radio station in the United States. It started transmitting in 1920 about six months before the launch of the commercial station KDKA in Pittsburgh.

The NIST radio stations have been used as the primary source for time and frequency measurement standards for decades. Even though in recent years people have come to rely on low-cost oscillators and global positioning satellites (GPS) for these standards, NIST estimates that over 50 million devices synchronize their time to the digital signals of WWVB. These signals have been transmitted continuously since 1963.

The initial motivation to establish these stations was to provide a frequency standard for use by commercial broadcasters whose equipment of the time was considerably less accurate and stable compared to what we expect today. Frequency broadcasts officially began on March 6, 1923.[4]

WWV's primary purpose today is to disseminate the "official U.S. time" to ensure that uniform time is maintained throughout the United States and around the world. In June 1944, the United States Naval Observatory allowed WWV to use the USNO's clock as a source for its time signals. Over a year later, in October 1945, WWV broadcast Morse code time announcements every five minutes. Voice announcements started on January 1, 1950 and were broadcast every five minutes.[5]

Wikipedia notes that "A binary-coded decimal time code began testing in 1960 and became permanent in 1961. This "NASA time code" was modulated onto a 1000 Hz audio tone at 100 Hz, sounding somewhat like a monotonous repeated "baaga-bong."[3] The code was also described as sounding like a "buzz-saw." On July 1, 1971, the time code's broadcast was changed to the present 100 Hz subcarrier, which is inaudible when using a normal radio (but can be heard using headphones or recorded using a chart recorder)."

Tech Talk September 2018 (2)

What are the details of the signals NIST broadcasts? NIST provides many helpful publications, including Special Publication 250-67 - NIST Time and Frequency Radio Stations: WWV, WWVH, and WWVB[6]. This report is a comprehensive 161-page description of how the stations work. Additional information can be found in NIST Special Publication 432, 2002 Edition - NIST Time and Frequency Services[7], and Enhanced WWVB Broadcast Format[8].

The format of the broadcast signals is very interesting[9 and Figure 1]. The signals contain much more information than you might expect. You can hear the station on 2.5, 5, 10, 15 and 20 MHz on a shortwave receiver or a HF ham transceiver with general coverage receive capability. WWV broadcasts a station ID at the top of the hour and at the half-hour. Significant storm information may be broadcast at 8, 9 and 10 minutes after the hour. GPS announcements are made at 14, 15 and 16 minutes after the hour. Geoalert warnings are announced at 18 minutes after the hour. The format for station WWVH in Hawaii is similar but special announcements are made later in the hourly cycle [Figure 2].

The binary coded decimal (BCD) time code data which appears on the 100 Hz subcarrier is illustrated in Figure 3. You can get a better sense of how to use this BCD time signal in the NIST publication WWVB Radio Controlled Clocks: Recommended Practices for Manufacturers and Consumers[10].

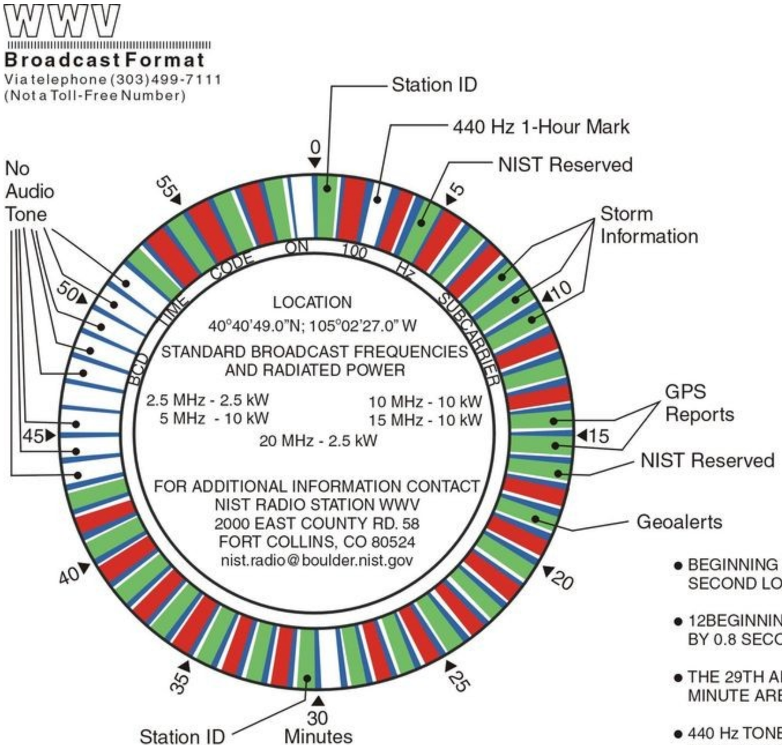
WWVB's carrier frequency is maintained to an accuracy of 1 part in 10^{14} and can be used as a frequency reference. The broadcast time is accurate to within 100 ns of UTC and 20 ns of the national time standard,
The next time a stranger asks, ”Hey, buddy, got the time?” you can answer with confidence if you listen to our friends at NIST.

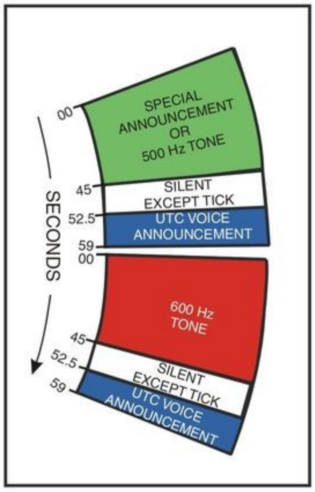
73,
Randy WU2S

References:

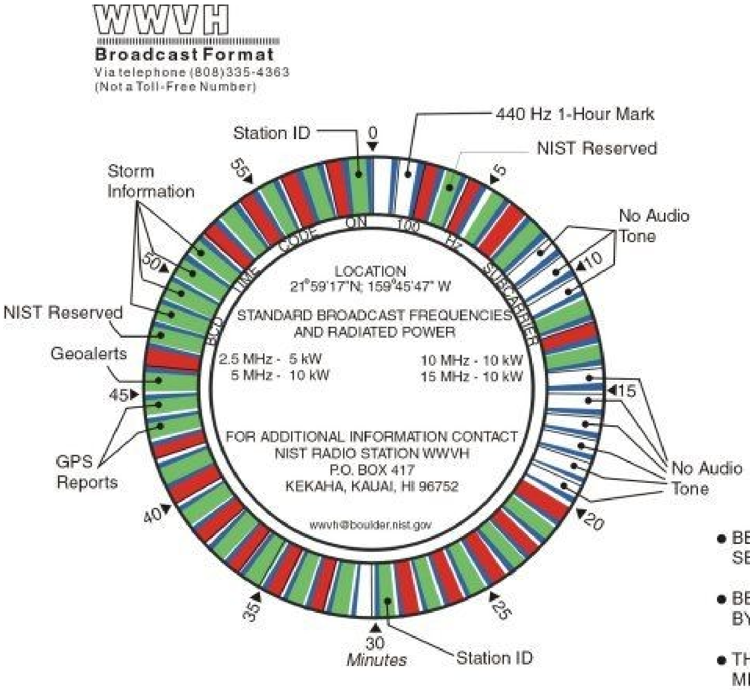
1. Thanks to the band Chicago for their song from their 1969 album “The Chicago Transit Authority”
2. ARRL article http://www.arrl.org/news/concern-rising-within-amateur-radio-community-over-wwv-wwvh-shut-down-proposal
3. Hackaday article https://hackaday.com/2018/08/20/what-will-you-do-if-wwvb-goes-silent/
4. Wikipedia: https://en.wikipedia.org/wiki/WWV_(radio_station)
5. Wikipedia: https://en.wikipedia.org/wiki/WWV_(radio_station)
6. NIST Special Publication 250-67: https://tf.nist.gov/general/pdf/1969.pdf
7. NIST Special Publication 432, 2002 Edition - NIST Time and Frequency Services https://www.nist.gov/sites/default/files/documents/2017/04/28/SP-432-NIST-Time-and-Frequency-Services-2012-02-13.pdf
8. Enhanced WWVB Broadcast Format - https://ws680.nist.gov/publication/get_pdf.cfm?pub_id=914904
9. WWV Broadcast Format https://www.nist.gov/pml/time-and-frequency-division/time-services/wwv-and-wwvh-digital-time-code-and-broadcast-format
10. WWVB Radio Controlled Clocks: Recommended Practices for Manufacturers and Consumers - https://tf.nist.gov/general/pdf/2422.pdf

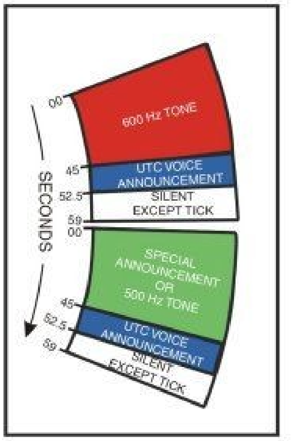
Tech Talk September 2018 (3)





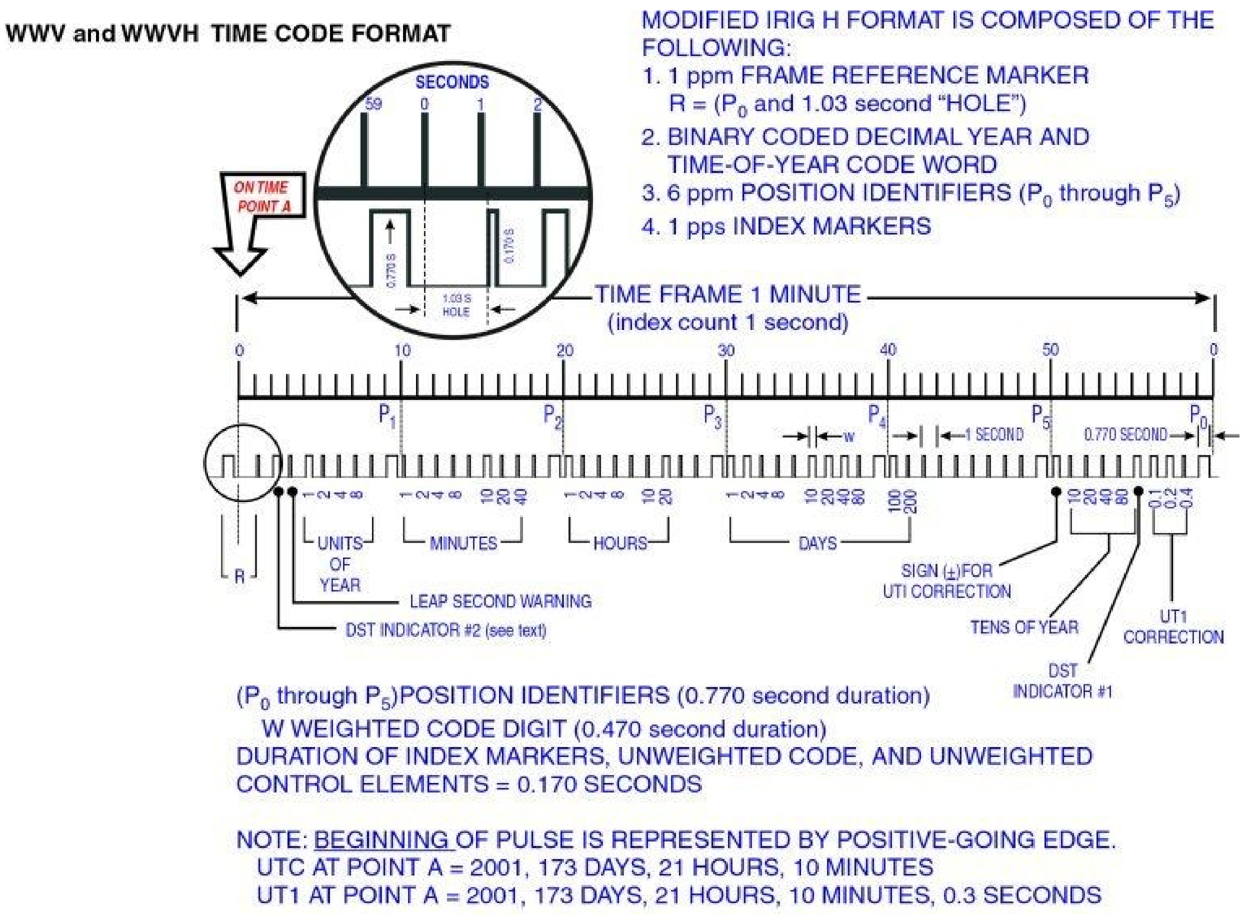
- BEGINNING OF EACH HOUR IS IDENTIFIED BY 0.8 SECOND LONG, 1500 Hz TONE.
- 12BEGINNING OF EACH MINUTE IDENTIFIED BY 0.8 SECOND LONG, 1000 Hz TONE.
- THE 29TH AND 59TH SECOND PULSES OF EACH MINUTE ARE OMITTED.
- 440 Hz TONE IS OMITTED DURING FIRST HOUR OF EACH DAY.





- BEGINNING OF EACH HOUR IS IDENTIFIED BY 0.8 SECOND LONG, 1500 Hz TONE.
- BEGINNING OF EACH MINUTE IDENTIFIED BY 0.8 SECOND LONG, 1200 Hz TONE.
- THE 29TH AND 59TH SECOND PULSES OF EACH MINUTE ARE OMITTED.
- 440 Hz TONE IS OMITTED DURING FIRST HOUR OF EACH DAY.

Tech Talk September 2018 (4)



MODIFIED IRIG H FORMAT IS COMPOSED OF THE FOLLOWING:

1. 1 ppm FRAME REFERENCE MARKER
   R = (P_0 and 1.03 second "HOLE")
2. BINARY CODED DECIMAL YEAR AND TIME-OF-YEAR CODE WORD
3. 6 ppm POSITION IDENTIFIERS (P_0 through P_5)
4. 1 pps INDEX MARKERS

(P_0 through P_5)POSITION IDENTIFIERS (0.770 second duration)
W WEIGHTED CODE DIGIT (0.470 second duration)
DURATION OF INDEX MARKERS, UNWEIGHTED CODE, AND UNWEIGHTED CONTROL ELEMENTS = 0.170 SECONDS

NOTE: BEGINNING OF PULSE IS REPRESENTED BY POSITIVE-GOING EDGE.
UTC AT POINT A = 2001, 173 DAYS, 21 HOURS, 10 MINUTES
UT1 AT POINT A = 2001, 173 DAYS, 21 HOURS, 10 MINUTES, 0.3 SECONDS

Congratulations To W2TTT!

The 2018 ARRL Hudson Division **Technician Award** goes to one of our own, J. Gordon Beattie W2TTT.

His work on VHF/UHF/Microwave weak signal work, in particular, and his award winning work with the Amateur Radio Emergency Data Network (AREDN) mesh high-speed data networks, is unparalleled.

His many years of experience working at Bell Labs developing 74 patents, some finding their way into Amateur Radio. In helping to develop mesh he has also branched out to taking that work and applying it to public service emergency communications. His lectures on the topic are many and can be found on You Tube.

Congrats Gordon!!

FLARC Antenna Raising Will Go To New Heights

Randy WU2S and the Technical Committee will need lots of help in getting the new antennas up in place on the clubhouse this Fall as well as doing necessary maintenance before the colder weather sets in.

Weekend work dates are being planned between September 8 - October 26. All volunteers will be required to wear hard hats and use other relevant safety gear. We have a lot of work to do but safe, steady progress is much more important than speed to completion.

For all the details, see or contact Randy at randolph@wu2s.com

September 2018 Meeting Notes

President Brad KM2C called the meeting to order at 7:30 p.m.

The members rose and recited the Pledge of Allegiance. Secretary Randy WU2S called the roll of officers and trustees and all were present. The meeting had a quorum to conduct club business.

President Brad KM2C asked if there were any visitors or new members present. Visitor Robert Wiener introduced himself to the members present. Stan KC2K, a FLARC past president, was recognized and applauded. Rob KA2PBT, our ARRL Northern New Jersey Section Manager was present. Mike N2YBB, our ARRL Hudson Division Director also joined us for the meeting.

Secretary Randy WU2S announced that he sent the minutes from the August meeting via email to members of record and published them in the club's newsletter, The Resonator, which is on the club's website at www.FairLawnARC.org. He asked the members present if there were any corrections or amendments needed. There were none so Skip KD2BRV moved to accept the minutes as published and John KD2NRS seconded the motion. The motion passed by acclamation.

Treasurer Al WA2OWL presented this month's Treasurer's Report. John KD2NRS moved to accept the report as read and Dave N2AAM seconded the motion. The motion passed by acclamation.

Secretary Randy WU2S reported for the Tech Committee. He announced that the club has undertaken several major projects. The first project is an improvement to our Internet access. President Brad KM2C provided a detailed description of the VPN service and the newly-installed router that provides access to all the services we need for amateur radio operations. Since the bandwidth is limited, we are not providing general WiFi access to this service for general Internet surfing.

Secretary Randy WU2S announced the development of plans for the second major project – maintaining and upgrading our antennas. He described the tasks we plan to accomplish in September and October as the weather permits. These tasks include:

1) Disassemble the HF antenna and part of tower #1

2) Disassemble the VHF 6-meter antenna and part of tower#2 while temporarily relocating the W2NPT repeater antenna

3) Repair the rotator plate on tower #2

September Meeting Notes (2)

4) Lift new tower section to the roof and install the 10' tower section on tower #1

5) Lift new tower section to the roof and install the 10' tower section on tower #2

6) Re-install the rotator, mast and thrust bearing on tower #2

7) Assemble a replacement 6-meter beam

8) Install the 6-meter beam on tower #2

9) Re-install the rotator, mast & thrust bearing on tower #1

10) Assemble the new HF beam antenna -
JK Mid-Tri w/40M

11) Install the HF beam antenna on tower #1

12) Re-install the repeater antenna on tower #2

13) Re-install the 2-meter beam antenna on tower #2

14) Perform antenna tests, tune and verification

15) Update office antenna patch panel

16) Install 80-meter dipole

Secretary Randy WU2S noted that our priority is working safely. All crew members will be required to wear hard hats and use other relevant safety gear. We have a lot of work to do, but safe, steady progress is much more important than speed to completion.

Secretary Randy WU2S said the first tasks to be addressed are likely to be those affecting tower #2 and the 6-meter beam. Starting with these tasks gives us the opportunity to work on a lower section of the roof, avoid any impact to the HF beam and other antennas on the upper roof section, and to gain confidence in our abilities to safely complete all necessary maintenance and repair steps with lighter weight components.

Secretary Randy WU2S mentioned that the Tech Committee proposes to setup an annual maintenance schedule so that our investment of time, money and effort is protected.

Steve WA2BYX asked if the mesh nodes would be repositioned as a part of this effort. President Brad KM2C replied that we are not planning to do anything with the

Continued on next page.

September Meeting Notes (3)

mesh nodes at this time, given the number of higher-priority tasks we should complete. We may revisit the mesh node maintenance in the Spring.

Ron KC2TBD asked about the weight of the planned components. President Brad KM2C described the weights and construction of the existing towers.

John KD2NRS asked about antenna wind loads and affects on the rotators. President Brad KM2C replied with a description of the loads and Bennett KO2OK noted that the Ham 4 rotators we use can handle 900 pounds which is well more than our needs. President Brad KM2C asked if there was any other old business and there was none.

President Brad KM2C asked Ed WX2R for a Publicity Committee report. Ed reported the following:

The current Speakers Schedule is:
- September 21: Barry Cohen (K2JV) "QRT-500 The Final Transmissions from UK Coastal Distress Watch Stations"
- October 19: Ken Neubeck WB2AMU "6 Meter Operating During A Low Sunspot Cycle"
- November 16: Andrea Slack (K2EZ) "The Art and Science of VHF Rovers"
- December 21: ARRL Speaker TBD
- January 2019: Stanley Eikert K3KKH "A Wireless Three-way Antenna Switch and Display”
- February 2019 FLARC Membership Survey

Planned FLARC Field Trips are:
- October 27: Field Trip to Thomas Edison Center, Menlo Park $15 admission charge-16 people are signed up so far
- Early 2019: Station tours of iheart radio cluster which consists of WSUS, WNNJ and WHCY all located in Franklin, Sussex County. Thanks to Dave N2AAM for help in arranging this tour.

Other Activities:
- October 21: Fair Lawn Street Fair (River Road) – We need volunteers to setup and staff the booth.
- The Publicity Committee asks members if we want to do a Great Falls/Earth Day event again next year?
- The Garretson Farm and Forge on River Road in Fair Lawn will celebrate its 300th anniversary next year. The Publicity Committee is in discussions with the historic site’s managers about operating a special event station.
- There may be a chance to operate a special event station at the Edison National Historical Site. The Publicity Committee is in discussion with the park rangers.
- The annual FLARC Membership Survey will be prepared in December. Are there any issues/questions you want to have asked?

September Meeting Notes (4)

Ed WX2R recommended that we spend $50 for ARRL Hudson Division program ad for the forthcoming Hudson Division awards dinner on November 3. It was noted that one of our members, Gordon W2TTT, will be receiving an award at that time. Steve WI2W moved that we approve the expense and John KD2NRS seconded the motion. The members present approved the motion unanimously by acclamation.

Ed WX2R reports that we saw record traffic in the past month for the Resonator blog both in page views and visitors. He expressed his thanks to all our newsletter contributors. We have another nice issue coming up.

Vice President Van W2DLT said that the Monday night net on the W2NPT repeater continues to be successful. He strongly recommends connecting via Echolink if you are out of direct RF range.

Thom W2NZ reported that we gained three new subscribers to our YouTube channel. View times continue to rise. Fred W2AAB said that he was away for two weeks and the CW class will resume next week.

Vice President Van W2DLT announced that FLARC-branded apparel is available from Ham Threads on their website (http://www.hamthreads.com). Van recommends buying a shirt to highlight your FLARC membership at the many public events that we conduct.

Vice President Van W2DLT reminded members that the NJ QSO Party operating event is on Saturday and Sunday September 15 and 16. He noted that our Portable Day event with BARA will be in Memorial Park on Saturday September 15 from 9:00 am to 4:00 pm. He asked members to consider “Why not do both events?” We will use the special callsign N2J for the QSO Party and we will issue a special QSL card designed by Jim W2JC for these contacts. The card can be seen at https://www.qrz.com/lookup/n2j . Van said that since this is one time when New Jersey stations are greatly sought out for contacts on multiple bands, it is a wonderful opportunity to work a lot of HF stations all over the world. Ed WX2R noted that a Southern New Jersey club had challenged FLARC to beat them in the NJ QSO Party. All members present expressed a strong interest in achieving the highest NJ score in the contest.

Vice President Van W2DLT reported that the Frankford Radio Club, a contest organization, is holding a picnic at the home of Peter W2IRT in West Caldwell on Sunday, September 9 at 2:00pm. All are welcome, and you do not have to be an FRC member to attend.

Continued on next page.

September Meeting Notes (5)

President Brad KM2C addressed the projected costs of our antenna maintenance and upgrade project. He said that the JK beam antenna and the two new Rohn 45 tower sections are the most expensive components. The specifications of the JK beam antenna can be found on the JK antenna website (https://jkantennas.com/jkmidtri.html). This antenna costs about $2700 and will give us greatly improved performance and coverage on the 10-meter, 15-meter, 20-meter and 40-meter bands. The two tower sections will cost about $700 total if purchased new. Brad said he is looking for local sources for used tower sections in good condition. If you know any sources for used Rohn 45 tower sections, please contact Brad. He continued with additional information about incidental components we should purchase.

President Brad KM2C explained that the total amount we plan to spend on the complete antenna project will not exceed $4000 and is likely to be closer to $3500. He asked for a motion to authorize this expenditure. John KD2NRS moved that the club spend no more that $4000 on the antenna maintenance and upgrade project. Tony N2SIQ seconded the motion. A short discussion among the members present ensued. Secretary Randy WU2S called for a vote on the motion. The members unanimously passed the motion by acclamation.

Bennett KO2OK announced that the VHF Contest will be on this Saturday and Sunday, September 8 and 9.
Gene WO2W thanked Judith KC2LTM for sending a get-well card from the club to his wife Ruth.

Dave KD2MOB said that Fair Lawn RACES received a new call sign from the FCC – KB2FLR – with the FLR representing Fair Lawn RACES. He thanked the club for the use of the W2NPT repeater for monthly RACES nets. Dave announced that a short RACES meeting will be held after the FLARC business meeting.

ARRL NNJ Section Manager Rob KA2PBT said that he is sponsoring an individual award plaque for the upcoming NJ QSO Party. He presented FLARC with a copy of the ARRL Operating Manual and a set of frequency charts. He congratulated Randy WU2S on his recent interview on ***Ham Radio Now***
(https://www.hamradionow.tv/episodes/2018/8/14/hrn-401-aredn-inc).

September Meeting Notes (6)

President Brad KM2C turned the floor over to ARRL Hudson Division Director Mike N2YBB. He noted that he is running for re-election as Hudson Division Director this Fall. He recounted his extensive experience, described his views on the issues facing the ARRL, contrasted his position with that of his opponent and asked for support in re-electing him. He said that he would be available for additional questions after the business meeting.

Having no further business, President Brad KM2C asked for a motion to adjourn. John KD2NRS so moved and Gene WO2W seconded the motion. The members present voted in favor and the meeting was adjourned at 8:49 p.m.

Respectfully submitted,

Randy WU2S, Secretary

Fair Lawn RACES Meeting Notes September 2018

David KD2MOB called the FL-RACES meeting to order at 8:50 PM.
Attendance:
David KD2MOB, Rosalyn KD2GKA, Randy WU2S, Ed WX2R, Zach KC2RSS, Steve WA2BYX and Karl W2KBF.

Minutes from the August 3 meeting were approved.

Message training is postponed until Sept. 14 due to lack of time tonight.

David noted that a new Vanity Call KB2FLR has been issued for Fair Lawn RACES.

David will be taking evening classes starting on 9/17 until mid-November so he will need an alternate operator to support the FL- and BC-RACES Nets.

Ed WX2R is working on the design of FL-RACES shirts.
Meeting was closed at 9:00 PM.

Respectfully Submitted,
Karl W2KBF
FL-RACES Secretary

More New Check-In's For The Near and Far Net

Our list gets longer so we need another page -- here are more check-ins to the Monday night *Near and Far* net.

Name	Call
Aly	**AL0Y**
Bob	**N2HIP**
Judith	**KC2LTM**
Fred	**W2ABE**
Paul	**W2IP**
Chris	**W2TU**
Stan	**KC2K**
John	**K2BIX**
Harry	**KB3PQP**
Paul	**K2PJC**
Noel	**N2OEL**
Tony	**KA2TAM**
Tommy	**KD2OBY**
Tom	**N2AXX**
Benjamin	**KD2QHI**
Marco	**KC2ZMA**
Nomar	**NP4H**
Bruce	**NJ2BK**
Ros	**KD2GKA**
Tony	**N2SIQ**
Larry	**KD2QFI**
Bob	**W2REC**
Bob	**KD2OPT**

Short Distance QSO Gets QSLed

A less than one mile FT8 QSO on August 10 between W2NPT and WX2R was confirmed. Ed had never had a QSL for a club QSO. "Ground wave ...not Bouvet!" Mike was heard to remark.

Ed WX2R with Mike KC2ZX holding the FLARC QSL

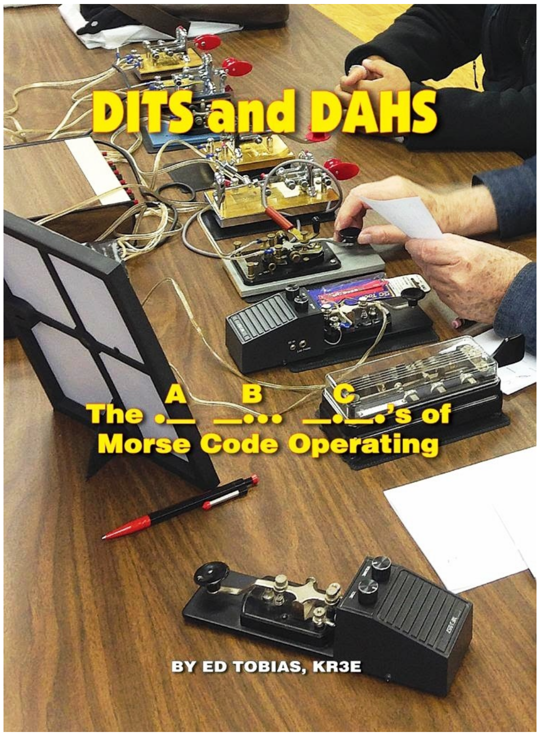
WA2ALY Gets Covered

Larry WA2ALY woke up earlier this month, checked his email and found this CQ Magazine advertisement for their new "Dits and Dahs" book.

The photo on the book's cover was taken of his keys that he brought to KJI's s *Customer Appreciation Day*.

"Who knew" Larry says, "Buy a book".

(Did he get a $1 for his release?)



Finally... WU2S In The News

Our own Randy Smith, WU2S, ARRL NNJ Technical Specialist, interviewed about AREDN on ***Ham Radio Now***!

Here is the link:

YOUTUBE.COM

HRN 401: AREDN Inc.

Use this link: http://bit.ly/2wDRGfO

Randy Smith WU2S joins David and Darren AJ6BL to talk about Amateur Radio Emergency Data Network.